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Original Articles

GLOUCESTER AND THE BEGINNINGS OF THE R.M.P.A.*

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THE 120th year of our Association's existence is nearing its end and we are approaching the actual 120th anniversary of its foundation. Through the kindness of the Management Committee we are able to meet at its birthplace, Gloucester, and to visit the hospital where it was conceived and brought into existence. At that time known as the Gloucestershire General Lunatic Asylum, and now as Horton Road Hospital, it is one of the oldest buildings continuously in use for the care of the mentally ill.

Two accounts of the early history of the Association have previously been published. The first is a six-page summary written by Dr. Hack Tuke and prefacing the first General Index to our *Journal*, which was prepared by Dr. Blandford in 1879. The other was written by Dr. Outterson Wood and appeared in the *Journal* for April, 1896. It is unlikely that many of our present members will have read it, and as it is a careful and detailed abstract of the minutes of our first ten years, supplemented by a few personal reminiscences contributed by Sir John Bucknill, a survivor of those early days, the Editors would have been justified in reprinting the whole or part of it in commemoration of this anniversary year. However, Dr. Wood's account does not give much background

* Read by Dr. Walk, President of the Association, at the Quarterly Meeting held at Gloucester, 3 May, 1961.

to its chronicle of meetings, and, moreover, inquiry has shown that there is more to be said, not only about the Association's early activities but also about its founders and about its pre-history and the history of the Gloucester Asylum, all of which are seen to be closely bound up with the origin and early development of the mental health services in this country. It seemed to me therefore that it might now be appropriate to present a fresh account with a wider scope than Dr. Wood's, and this I have been able to do in collaboration with Dr. Lindsay Walker; we should like also to acknowledge the help given by Mr. P. W. Grant, the Group Secretary, who independently has brought to light much information extracted from the early minute-books of the hospital.

We will go back then to the year 1788, and recall that in the spring of that year King George III showed the first signs of the famous manic episode which reached its height in November and lasted well into the following year. In July he was advised to take the waters at Cheltenham and during August he visited this city of Gloucester, and there are various accounts of his excited behaviour here—how for instance he went down at a very early hour to inspect the new bridge and "had a huzzay" with the local boys assembled there. Now, only a short distance from the bridge there stood another newly-erected edifice—the Gloucester gaol; and this gaol had been planned and erected, and a reformed system of discipline instituted by the then High Sheriff, Sir George Onesiphorus Paul. Sir George was a disciple of John Howard and much engaged in local philanthropic activities;* on this occasion it was part of his more ceremonial duties to meet and greet the King on his arrival in the county.

When the news of the King's serious mental state was made public later in the year there was much consternation, and a good deal of interest was aroused in the treatment of mental illness in general. Sir George Paul could hardly have failed to share in this general concern and to have recalled the symptoms which he had himself observed during the King's visit. From this time he began to study what was being done elsewhere for the insane and he visited the few public asylums which had been established in provincial cities, namely those at Manchester and Liverpool, which were closely connected with the general hospitals, and the York Asylum which was an independent institution. This latter was the asylum which later became notorious for its abuses, but Paul's impression was that it was "a truly noble institution" and wisely administered by its physician, Dr. Alexander Hunter.

* His memorial in Gloucester Cathedral bears the following inscription:

To the Memory of Sir George Onesiphorus Paul
Who died January 16th 1820 aged 74 years
A Man
Endeared to his friends by many virtues
Both public and private
But who claims this mark of local respect
By having first reduced to practice
The principles which have immortalized
The name of Howard.
For to the object of this memorial it is to be ascribed
That this County has become the example and model
Of the best system of Criminal Discipline
In which provident regulation has banished the use of fetters
And Health been substituted for Contagion
Thus happily reconciling humanity with punishment
And the prevention of crime with individual reform.

The first steps to start a similar asylum at Gloucester were taken in 1792, and this is also the year in which plans were made for the foundation of the York Retreat and of the Edinburgh Royal Asylum. At first the project, which was submitted to the General Court of the Gloucester Infirmary, was turned down as impracticable, but in the following year Paul submitted reports on the financial basis of the existing asylums which encouraged the Governors to approve the proposal and open a subscription, on the understanding that the new institution would be independent of the Infirmary.

In July, 1794, a general meeting of the subscribers was held, and was addressed at great length by Paul, who submitted a complete scheme both financial and architectural. The whole of this, and the rest of the proceedings, was printed and published. The list of subscribers includes the celebrated Dr. Edward Jenner, Robert Raikes (the founder of Sunday Schools) and the antiquaries, Daniel and Samuel Lysons. The architect engaged was none other than John Nash.*

Paul's address is chiefly notable for its careful exposition of the different classes of patients who were to be benefited, and for the closely-reasoned discussion of the relation of a charitable institution to the Poor-Law. There were to be three classes of patients: the first to be received at relatively moderate fees; the second partly at the cost of the parish; the third, persons not entitled to parish relief, at the cost of the charity if the surplus from payments by first-class patients permitted.

He went on to argue that it was lawful according to the Elizabethan Poor-Law to provide relief for the insane in the same way as for other sick persons; "if the patient be thus incapacitated, disabled, forlorn, he is entitled to such assistance as will tend to relieve his malady on the same principle as relief is given to those incapacitated by fever, palsy or broken limbs". The Act of George II which referred to persons "furiously mad or dangerous to be permitted to go abroad" should be liberally interpretated as applying to all lunacy, and stress should be laid on the expression "keeping, maintaining and curing" the patients used in the Act. The parish should therefore be expected to pay the proposed asylum something more than the cost of keeping the patient "bound with chains in a workhouse cellar".

However, notwithstanding the enthusiasm shown at the meeting, funds accumulated very slowly, and twelve years later, in 1806, the asylum still existed only on paper. In that year Paul became concerned about the fate of two prisoners, one insane but much improved, the other possibly feigning insanity, who were languishing in Gloucester gaol, having been ordered to be detained during His Majesty's pleasure; and there was no legal means of procuring their release. Paul thereupon addressed a memorandum on the whole problem of criminal and pauper lunatics to the Home Secretary, Earl Spencer, and this led directly to the appointment of the Select Committee of 1807, of which the chairman was the Under-Secretary, Charles Williams-Wynn.

Paul's memorandum is printed as an appendix to the Committee's Report and he was called to give oral evidence "on account of his humane and unwearied attention to the subject". He pointed out that under the existing system criminal lunatics would accumulate in gaols, and since the expense fell on the county instead of on the parish, "poor-law officers would be inclined

* "Minutes of Proceedings Relative to the Establishment of a General Lunatic Asylum near the city of Gloucester, including a Digest of a Scheme for such an Institution addressed to a General Meeting of Subscribers held on the 14th of July 1794. By Sir G. O. Paul." Gloucester, 1796.

to encourage rather than prevent outrages on the part of such persons". The restraint imposed on the criminal insane should be effected as an act of humanity to the object as well as one of security to the public. He went on to plead the cause of the pauper lunatic, chained in a cellar or garret or tied to a post or the leg of a table in a workhouse, or left to ramble half-starved and subjected to teasing and jests. He advocated a combined criminal and pauper asylum in each "circuit or other large division of the country" to be established on the pattern intended at Gloucester. Asylums should be near large towns so that the patients could be under the care of "a physician of eminence".

The Committee's Report, however, envisaged a rather different solution. Criminals should be concentrated in one central asylum. For paupers the asylums should be built by the county justices at the expense of the county rate, and counties might unite in groups for the purpose, or might unite with a body of subscribers to provide a joint asylum. The Committee thought that unions of counties would be the rule so as to make possible "large" asylums, by which however they meant asylums of not more than 300 beds; they estimated that 16 asylums of this size would be sufficient, and like Paul they emphasized the need for "the best medical attendance". These recommendations were adopted by the Government and were embodied in the County Asylums Act of 1808, generally known as Wynn's Act, and so began the chain of asylums, at first few and small, which gradually spread over the whole country.

Now at Nottingham, as at Gloucester, a voluntary committee associated with the general hospital had been in existence since the time of George III's illness and a fund was accumulating with a view to building an asylum. As soon as the Act was passed the Committee applied for union with the Town and County, and this was agreed; land had already been bought at Sneinton not far from the centre of the town, and the asylum, for 90 patients in three classes, was opened in 1812, sharing with Bedford the honour of being the first erected under the Act.

At Gloucester matters progressed more slowly. The land at Horton Road was bought in 1811 and fresh plans were invited from William Stark who had recently published his project for the Glasgow Asylum, the forerunner of Gartnavel. But in 1811 news from Nottingham seems to have reached Gloucester, and the success of the arrangements there was brought to the notice of the Gloucester Committee; in consequence negotiations were begun with the City and County magistrates and an agreement was arrived at for an asylum to accommodate 24 "opulent" patients, 26 charity and 60 pauper patients—110 in all.

Perhaps the reason why steps for a union were not taken earlier was that Sir George Paul was not really satisfied with the system embodied in the Act which, it will be remembered, differed from his own recommendations. He had therefore not taken the initiative in seeking a union, and in fact he spoke against it at the Quarter Sessions meeting in January, 1813 on the grounds that the proportion of the cost to be paid by the County was excessive, and the raising of a county rate would postpone indefinitely the erection of the new Shire Hall*. It is recorded that when the Court opened there were 49 members present, but the proposal for the union was carried by 8 votes to 6, and it is not stated at what stage of the proceedings the other members had left.

William Stark died in the same year and a local architect, John Wheeler, was appointed in his place. It is said that Stark's plans were not understood and that his successor had to "enlarge the scale of drawing" to provide some

* The Shire Hall was in fact completed first, in 1820.

additional accommodation. Wheeler in turn died a year or two later and was succeeded by Collingwood. It is impossible to say therefore who was responsible for the general plan—for the elegant stucco-fronted crescent which is the most striking feature of the building, and for the "pauper wing" projecting back from the centre of the curve. The crescent is a magnificent example of the Regency style and is much more suggestive of the original architect, Nash, than of Stark's more ponderous construction at Glasgow.

Nor is it possible to say who was to blame for the wretched arrangement of the pauper section, which was divided longitudinally by a wall separating male and female wards so that the single rooms on each side were back to back and received no daylight or ventilation except indirectly from windows on the narrow gallery running in front of their doors.

In accordance with the ideas of the times it was also thought necessary to provide a few strong cells with stone slabs for beds, intended for refractory patients. At Nottingham they were in the basement of the main building (though this was stated to be above ground level); at Gloucester the more ingenious plan was adopted of placing them off the sunken area in front of the crescent, i.e. under the forecourt, where some of them can still be seen.

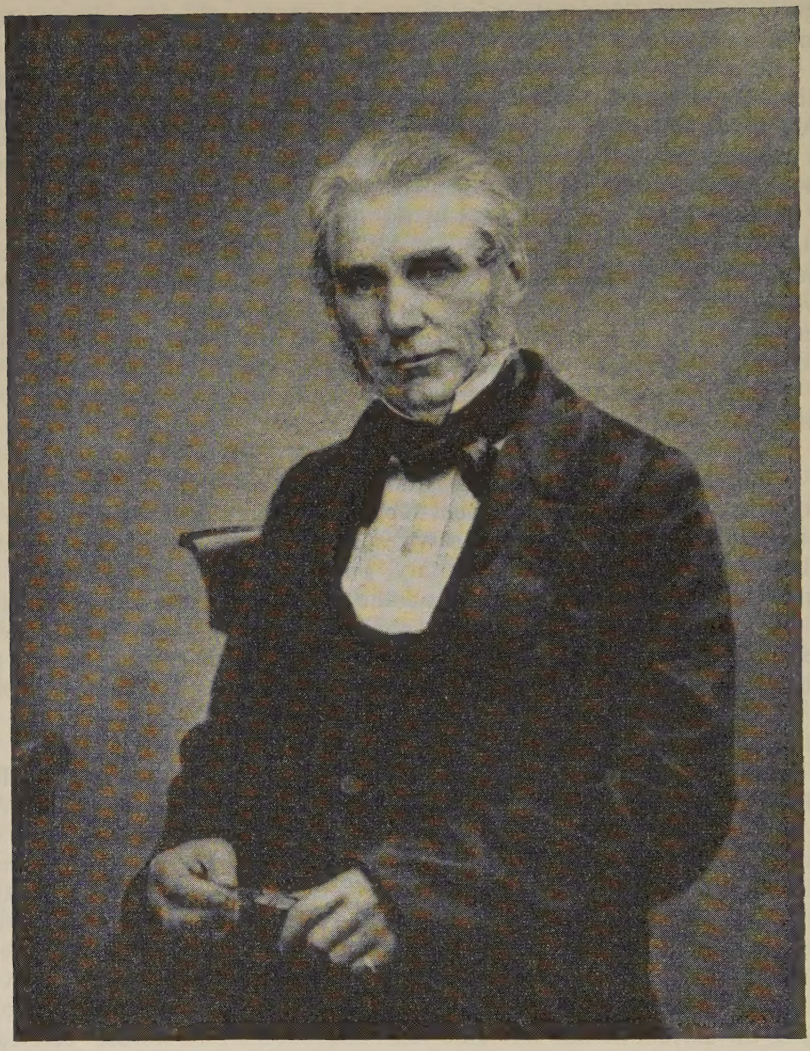
For various reasons the completion of the asylum was delayed again and again and it was not opened until July, 1823.

From the beginning the Hospital Committee adopted the policy of appointing a medical man as resident superintendent. In addition they followed the usual custom by enlisting the services, as Visiting Physician, of a member of the staff of the Gloucester Infirmary. This was Dr. Hardwicke Shute, one of a distinguished medical family, and the author of a two-volume work on *The Principles of Medical Science*, published in 1830. The first resident superintendent, George Poynder, left in 1828 and afterwards became the first medical superintendent of the Kent County Asylum, now Oakwood Hospital, and Samuel Hitch, whom we look on as the Founder of our Association, was elected to succeed him.

Hitch was 28 years old at the time of his election—"an able, bustling, intelligent man" as Sir John Bucknill described him many years later, adding that he was short in stature, and had red hair. No biographical notice of him appears to exist, but he himself records that he was educated "in the University of Oxford and the best medical schools of England, France and Italy". Presumably he held the licence of the Royal College of Surgeons and his wider interests are shown by his being a Fellow of the Linnaean Society. He took his M.D. and became a Member of the Royal College of Physicians in 1840 or 1841 and was thereafter known as "Resident Physician". Before his appointment to the asylum he had for some years been, in his own words, "connected with the medical charities of the County". Of this part of Hitch's medical career we have no details, but we can make a guess at his interest in psychological medicine from the one recorded case, to be mentioned later, which he treated in his own home in the year before his appointment.*

On the other hand we do know a good deal, from various sources, about Hitch's ideas and practices during his twenty years at Gloucester; but before

* Another instance of Hitch's enterprising character has been discovered by Mr. Grant. In 1836 he was one of two passengers in a balloon ascent organized by a Mr. Graham of Gloucester "in an attempt to gratify public curiosity". The voyagers "spiritedly waved flags and hands until distance rendered them imperceptible". They eventually came down on Bredon Hill, where they were thrown out and "did somersaults into a turnip field, but without any harm".



SAMUEL HITCH

studying these, and in order to keep to chronological sequence, his conduct during a fire which occurred in the hospital in 1832 should be recorded. On 12 May the Committee voted him their best thanks for the prompt and judicious measures he took and for his active exertions in restoring the premises to order and offered to indemnify him for losses of property of his own which had been sacrificed while "his mind was abstracted by his attention to the property of the asylum". Later some compensation was also made to him for "great privations and discomforts" to which he and his family were subjected in consequence of the fire.

In 1835 James Cowles Prichard, the well-known Bristol physician, published his famous *Treatise on Insanity*, and in the course of preparing this expanded version of his earlier articles in the *Cyclopaedia of Practical Medicine* he wrote to Hitch for information on three subjects with which he was particularly concerned, namely, Moral Insanity, General Paralysis of the Insane, and the recovery rate in asylums, and Hitch's contributions were gratefully acknowledged and incorporated in Prichard's book.

It is still perhaps not generally realized that Prichard's "Moral Insanity" did not primarily refer to delinquency but to any form of mental disorder in which, to quote his own words, "the conduct, temper and habits of the patient were alone disordered, while the reasoning faculty remains unaffected". It is not surprising therefore that the ten cases contributed by Hitch and accepted and published in full by Prichard should have been of the most varied kind.

I shall attempt a summary of them, first quoting Hitch's own introductory note: "I could easily furnish a great number of instances coinciding with your description of moral insanity. We have recognized them for a considerable time and term individuals so affected 'insane in conduct and not in ideas', a distinction which has often led us into difficulty . . . when justifying our detention of a patient who has made a plausible tale to the visiting magistrates". He was of course alive, as was Prichard, to the forensic importance of the matter and added "your discrimination supports a belief which I have long indulged that many who have been convicted of crimes ought to have been pronounced insane".

The cases include 6 men, 3 women and a child.

Of the male cases the first was a man of 40, normally of a mild and retiring disposition, who after a short depression caused by business losses bestirred himself, recovered his fortune, then became over-active, hasty and irascible, threatened violence and eventually abandoned his family. His symptoms after admission were typically maniacal and he recovered in three months. The second, who had previously been treated in Bethlem*, was an elderly farmer with extravagant ideas of wealth and property and a propensity to mischief-making and rubbish-hoarding but also capable of much kindness and helpfulness in the ward. A third was an example of "monomania"—an intelligent young man liable to periods of despondency when he felt so inadequate and incompetent that on one occasion he made a suicidal attempt by poisoning.

These are plainly cases of manic-depressive psychosis; two more probably come into the same group but were associated with alcoholism; one a gentleman of good connections and high moral character who became irregular and negligent, irritable and overbearing; in hospital he would make an apparent recovery but soon return to his former habits; the other was a lifelong drinker, who had episodes in which he performed all kinds of mischievous actions which

* John Hartland, described also in *Sketches in Bedlam*, page 135.

he called "having fun", but on recovery he would wonder how he could possibly have behaved in such ridiculous ways.

The last male case was that of a lawyer who after some affront "lost all his good feelings" and developed severe morbid irritability; but as he also suffered from severe headaches and died of a stroke within two years the diagnosis is not in doubt.

Of the women, one was aged 30, a mother of 8 children, who developed "violent paroxysms of passion followed by morose sullenness" and in hospital was lazy, seeking attention, and liable to scream, roll on the floor and break windows; the second, a well-educated young lady who became first dejected, then unmanageable, but recovered in three months; the third, a woman liable to repeated suicidal impulses.

The case of the child is more interesting; it seems to have become classic, and was quoted by Crichton-Browne in 1860 and by Maudsley in 1868 and the subsequent editions of his *Pathology of Mind.* Neither of these authors disputes the diagnosis of "Moral Insanity", but we may well do so. It will be noted that the case occurred before Hitch's appointment to the asylum.

"The following case is not a common one. In the spring of 1827 I was requested to visit the daughter of a farmer, in some branches of whose family insanity existed. The little girl was only seven years old. She was reported by her parents to have been a quick, lively child, of ready apprehension, mild disposition, affectionately fond of the members of her family, and capable of quite as much application to her school duties as children usually are. She had been sent home from school in consequence of a great change which had taken place in her conduct. She had become rude, abrupt, vulgar, and perfectly unmanageable; neglecting her school duties, running wildly about the fields and gardens, and making use of the most abusive language when chidden for her misdemeanours. I found her in this state with the addition of having become extremely passionate in consequence of corrections to which she had been subject and to escape which she was prone to invent falsehoods. She was also changed in her appetite, preferring raw vegetables to her ordinary food; and she would sleep on the cold and wet ground rather than in her ordinary bed. Her parents had no control over her; indeed, she appeared to despise them in proportion as they kindly remonstrated. She was cruel to her younger sisters; taking every opportunity to pinch or otherwise hurt them when she thought she could escape observation. She could not apply herself to anything, but had yet a perfect knowledge of persons and things and a complete recollection of all that had occurred and of all she had learned previously to her illness. Her general health was much disordered; her little eyes glistened most brilliantly; the pupil was contracted, though expanding widely if she was suddenly excited; the conjunctiva was reddened; the head was hot; the surface of the body of about the natural standard; the extremities of a lower temperature; and the palm of the hand had as completely the peculiar feel of the nervous as a grown person; her person had a disagreeable odour; the bowels were much disordered from the various strange things she had eaten. Dr. B—— saw her in conjunction with me; and we endeavoured to improve her general health, hoping that by so doing we should remove some exciting cause for her disturbed feelings; we were disappointed. As she grew worse and her parents by mismanagement, sometimes humouring her, sometimes harshly correcting her, were likely to render her still more disordered, I took her into my own house and placed her under the care of my wife. At this time she had taken to eat her own faeces and to drink her urine, and she would swear like a fish-woman and

destroy anything within her reach; yet she was fully conscious of everything she did and generally appeared to know well that she had done wrong. Having committed some mischief or destroyed something which was fragile she would often run to my wife and exclaim, 'Well! Mrs. H——, I have done it! I have done it! I know you will be angry but I can't help it; I felt I must break it and I could not let it alone until I had!' Amongst her pleasures was that of dirtying herself as frequently as she had clean clothes; indeed she would rarely pass her excretions at the proper place, but reserved them for the carpet of the sitting-room or for her own clothes. When she had accomplished this end she would jump about and exult; but the little creature would often induce my wife to smile at her when with an expression of countenance which was always intelligent, made up of cunning, feigned regret, and a subdued smile, she would say, 'Well, Mrs. H——, 'tis too bad of me; 'tis really very foolish and I will try to be better; but you must forgive me because I am mad.' At other times she would be so far conscious of her situation as to cry bitterly and express her fears that she should become like her aunt who was a maniac. In addition to all these indications, she lied, stole anything which she thought would be cared for and either hid or destroyed it, and swore in language which it is difficult to imagine that the child could ever have heard.

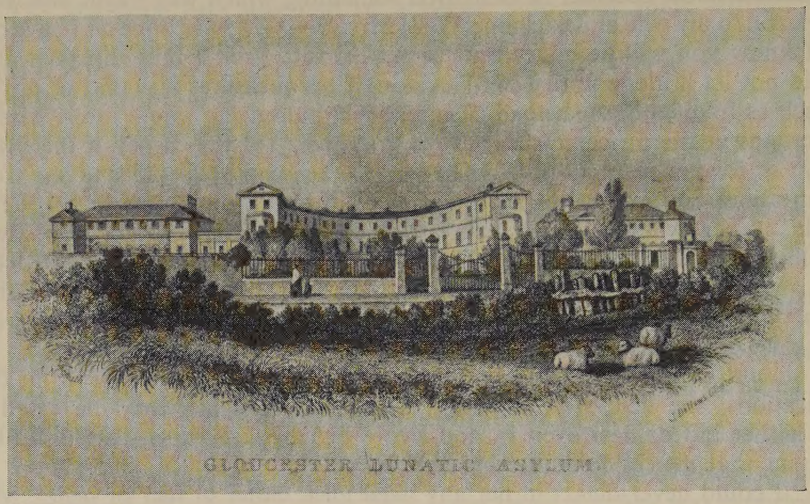
"I could never detect in her any fixed idea, either of fear or belief, which influenced her conduct. She acted from the impulse of her feelings and these were unnatural and unhealthy.

"*She recovered in about two months.*"

As for *General Paralysis*, Prichard says: "I have been informed by Mr. Hitch, the resident medical officer of the Gloucester Lunatic Asylum, that many instances of the same disease have occurred in that hospital. He says, 'I find in the records of the establishment that 16 well-marked cases of this disease have passed under our view since May, 1828. Of the 16 cases which I have had under my charge, 15 were males and 1 female.' This proportional excess in the number of male paralytics is in accordance with the observations of M. Esquirol. With respect to the event of these cases, it is reported that they were all ultimately fatal. The female died after an attack of menorrhagia and her death was thought to be its consequence. Of the males, five died in the house, six were discharged as incurable and harmless, and three were removed by their friends. Mr. Hitch adds, 'Of the individuals discharged and removed by their friends all are since dead, at least so I am informed'."

At that time the population of the asylum was about 100 and the total admissions for the period reviewed numbered 252. These observations must be taken in the context of the newer knowledge of the origin and spread of G.P.I. set out in Dr. E. H. Hare's excellent article in our *Journal* for July, 1959. The disease was still comparatively rare in England, but the male predominance and the rapid course of the cases described suggest that they were correctly diagnosed and that "paralytic" was used in a more precise sense than it had been in the earlier Bethlem reports.

Hitch also sent Prichard a table showing some statistics of the asylum since its opening. Since the first two years offer no criterion owing to the admission of chronic cases, I have extracted the figures for the five years of Hitch's own régime. As already stated, there were 252 admissions in this period and during the same time 143 patients, or 56 per cent., were discharged as "recovered" and 19 more as "relieved", some of whom were discharged on trial and recovered in a short time. Prichard found even the rather lower figure for the ten years of the asylum's existence most impressive, especially as



The Gloucestershire General Lunatic Asylum in the 1840's.

Horton Road Hospital, Gloucester, as it is to-day.

"lunatics of all descriptions were reckoned fit objects to receive the benefits resulting from this excellent establishment". It was in fact the highest recovery rate in the country.

Mention has just been made of the grant of trial leave to patients, but this appears to have been an innovation on Dr. Hitch's part, for the practice was noticed and heavily frowned on by the Commissioners in their great Report of 1844. "At Gloucester", they say, "the superintending physician permits patients, before they are discharged, to go home to their own families and receives them again [presumably in the event of relapse] without requiring fresh Orders and Certificates; and ten or twelve Pauper Lunatics appear to have ingress and egress from the asylum at all times at their own discretion. This practice is contrary to law and appears to us to be open to serious objection". Subsequent legislation did, however, allow trial leave, though at the same time it effectively suppressed for a century any informal ingress or egress of patients.

But Hitch had other original and unconventional ideas. His own wife, who had been so successful in managing the disturbed child in her own home, was appointed Matron in 1838, and this was not at all unusual at the time; but in 1841 the Committee approved the employment as a nurse in the refractory ward of the wife of the charge attendant. Professor George Robertson, who was an enthusiastic advocate of female nursing of male patients, recorded this as the first instance known to him, and from a private source he confirmed that Hitch's motive was to encourage a more gentle ward life. The Committee minutes suggest that the experiment was later extended to other wards.

The French psychiatrist, Parchappe, who visited England in 1847, reported on another remarkable innovation, namely the creation of a small self-governing unit:

"This is quite an exceptional arrangement. The patients who work in the gardens occupy special quarters consisting of a kitchen-refectory with an open fire and a dormitory with 14 beds. The patients live here by themselves; the door is open directly to the gardens and is outside the asylum wall. They are supervised only by the head gardener who lives in a cottage at some distance. They go to bed at 8, get up when they like. They come and go freely just as they wish. If they wish to go into the town they have only to ask the gardener's permission. The establishment provides them with meat, bread and beer, and the gardener gives them fruit and vegetables; they do their own cooking and run their household for themselves.

"The medical superintendent claims that no inconvenience of any kind has resulted from this peculiar arrangement, and this seems to show how very far one can go in introducing into institutions conditions as nearly as possible resembling those of ordinary life."

Needless to say, Hitch was not far behind in adopting progressive ideas from other hospitals. Following the example of Sir William Ellis at Wakefield and Hanwell, he started a Benevolent Fund, from which small sums of money, and occasionally tools, were lent to poor patients on their discharge. Early in 1840, within a few months of Conolly's sensational action in abolishing mechanical restraint, he visited Hanwell, and on 6 April the result is thus recorded in the minutes of the Committee:

> "Mr. Hitch states that having been to the Hanwell Asylum he found that no personal restraint is there used upon any patient which is stated to conduce greatly to the cure—and that this is effected by having more day-rooms and more Keepers in proportion than at this asylum—but one

male and one female Keeper additional would be enough here for that purpose to contribute greatly towards the object tho' the additional rooms should not as yet be obtained—

ORDERED that one male and one female Keeper be engaged."

On this subject of restraint the annual report of the Visiting Justices, written in a mood of self-congratulation on the "unhoped for degree of perfection" reached by their institution, gave the following as their views and those of the medical superintendent:

"The avoidance of restraint so far as compatible with security has always been a standing rule. We cannot, however, agree that restraint is necessarily detrimental in all circumstances. We have every reason to believe that seclusion [advocated by Conolly] is more prejudicial to recovery. We believe also that moral restraint, i.e. the example given by patients to each other, will eventually enable mechanical restraint to be discarded in large institutions."

Hitch did in fact abandon the use of all means of restraint within a year or two. A quaint testimonial to the humane methods in use towards the end of his superintendency is to be found in the volume of "Evidence given at the Enquiry held into the Management of Dr. Bompas's Private Asylum at Fishponds, Bristol", in 1847. The witness, Thomas Cook, had been an attendant there but had subsequently become a patient at Gloucester:

Q. Was he [the Fishponds patient under discussion] a patient easily managed if he was kindly treated?
A. Yes, Sir, by assistance, not one man.
Q. That is when he was excited?
A. Yes, because one man had no right to be with a patient.
Q. No one man you say ought to be with a patient?
A. No; there ought to be two or three.
Q. With very excited patients you mean?
A. Yes; kind words are the best; kind treatment is the best.
Q. Have you found that to be the case with all patients?
A. Yes, I have been assistant keeper lately in the asylum and I see that kind treatment is the best.
Q. How long have you found that out?
A. Oh, these six months.
Q. Where have you been during these six months?
A. In the asylum at Glo'ster.
Q. The county asylum?
A. Yes.
Q. Are there any chains used in the asylum at Glo'ster?
A. No, sir, nor any restraint. If a patient is high, there are two or three keepers to be with them, and to treat them well, and the more kinder the patients are treated the better they are. I have assisted in cleaning and bathing ever since I have been well or able to do it. Thank God for it, as being my protector and keeper.

(The witness here was much affected and was permitted to withdraw.)

Some years ago I drew attention to the Report on British asylums published in 1843 by Dr. C. Crommelinck of Bruges*. Crommelinck visited Gloucester early in 1841 and, as we shall see, he was present at the first Annual Meeting of our Association later in the year.

* *J. Ment. Sci.*, October, 1954, **100**, 831, 834.

In his comments on the asylum Crommelinck begins with praise. "By its extent, its situation and thanks to the enlightened care of the chief physician, Gloucester can be accounted one of the pleasantest, best administered and most important establishments in England." But he criticizes very severely the contrast between the first-class patients' quarters in the crescent and those of the paupers in the wing, a contrast which, he says "is so great and so revolting as to produce the most painful impressions on anyone with humane feelings". With its back to back rooms, narrow passages, bars and double iron doors which, he says, still remained in spite of Dr. Hitch's protests, this part of the institution closely resembled a prison for criminals.

He explains that Dr. Hitch was becoming increasingly opposed to the continued association of patients of the two classes in the same building; for the pauper patients were well aware of the difference between their condition and that of their more fortunate fellow-patients.

In the course of correspondence Hitch had explained his principle of trusting patients to an extent not generally believed possible. He never refused to take a patient's word; a fifth part of the patients were under no restriction; they went to church in the town unescorted or in groups whose members looked after each other. But Crommelinck comments that the privileges granted to the paupers were never as extensive as this, and in the evenings they were largely left to their own thoughts while the more wealthy patients danced or played billiards or chess.

Crommelinck describes, however, with appreciation one of the dances at which he was present. It was on Twelfth Night. "There were about 20 patients with the doctor and his family, the lady companions and some guests; dancing was from 7 to 11, with supper at 9. During the evening Dr. Hitch succeeded in getting a young lady to dance whose state of melancholia had made her incapable of uttering a word for six months; her mutism was also dispelled, so that Dr. Hitch felt most hopeful about her prospects." As to this form of social therapy, the Committee's Reports for 1842 and 1843 mention that the system was being tried of introducing "a limited number of students of each sex (i.e. young medical men and young ladies of education) to an association with the patients of both sexes" and Dr. Hitch had formed the first-class patients, the students and his own family into one domestic party who "assembled daily for meals and for amusement in one or other of their respective apartments".

We will take leave of Crommelinck for the moment, but we may note here that Dr. Hitch's zeal for granting the utmost possible liberty to his patients continued to the end of his connection with Gloucester, for in 1846, the year before his retirement, we find the following Committee minute:

> "15th September 1846. The Case of Oliver Freeman, who had several times escaped from the institution, being then brought forward, and Dr. Hitch examined on the subject, from which it appeared that, though apparently well and quietly disposed, Oliver Freeman was not to be trusted, inasmuch as he had several times taken advantage of the liberty allowed to those who work in the garden to make his escape, and, when at large, had become violent and dangerous to others.
>
> ORDERED that Oliver Freeman be not allowed in future to go outside the walls without an order made to that effect by the Committee of Visitors as they consider it right to guard the public against the recurrence of such

violence—notwithstanding the Medical Superintendent's wish to avoid the responsibility of retarding his cure by restricting his liberty."

As for the separation of the private from the pauper patients, this was effected many years later. In 1856 the union between the subscribers and the County and City was dissolved, and in 1860 the Committee of Subscribers opened their new Registered Hospital at Barnwood House, which has thus just completed its century of existence.

We have attempted to give as full a picture as possible of Samuel Hitch, the man who later in the year of Crommelinck's visit, 1841, became the principal founder of our Association. It will not be out of place to recall some of the events and features of the year, both in the country as a whole and in the narrower asylum world in which our first members worked.

1841 was most notably a year of distress and destitution. Conditions for the mass of industrial workers were bleak; for the unemployed still more so. The Poor-Law of 1834 was so oppressive that in many parts its operation had to be suspended. Chartism was a formidable force; in the summer, Feargus O'Connor, who was soon himself to become a mental patient, was released from prison, and the agitation continued with renewed vigour. While the Anti-Corn Law League was seeking to relieve distress by allowing the free importation of food reports were coming in on the slavery of children in factories and mines and on the degraded state of the public health. Half way through the year a general election took place when the Whigs under Lord Melbourne were turned out and Sir Robert Peel formed a Conservative Government.

The link between the wider sphere of national politics and the affairs of the asylum medical officers is provided in the person of Lord Ashley, afterwards the Earl of Shaftesbury. Ashley had been one of the Metropolitan Commissioners in Lunacy since 1827; but in 1841 he was chiefly occupied with factory legislation, and after the election he expected a place in Peel's ministry, which, however, was refused him. This was a decisive event in the history of our mental health services; had Ashley received the expected promotion he would not have been able to bring about the reforms of 1842 to 1845, nor to exercise the influence he did as Chairman of the Commissioners for the next forty years.

In 1841 only 15 English counties had provided asylums under the 1808 Act, and this included those built in union with subscribers. There were 12 independent asylums or hospitals. Most asylums were still small though they were growing rapidly. Gloucester by now had 250 beds and Nottingham 170. The largest were Lancaster with 600 and Hanwell, regarded as a monstrosity, with over 900. There were 36 licensed houses in London, of which the largest at Hoxton and Bethnal Green still received many pauper patients under contract, and in the provinces there were about another hundred. There was not a single asylum, either public or private in Wales. Central inspection of the provincial asylums did not yet exist; it was only in the following year that the Metropolitan Commissioners were given the task of carrying out a survey of the whole country, and regular inspection was established by the Act of 1845.

The Scottish Chartered Asylums were all in existence, including the recently opened Crichton Royal, but as we have been reminded by Dr. MacNiven, conditions were generally very backward. In Ireland there were ten District Asylums, all overcrowded and overwhelmed by the numbers of chronic patients requiring admission.

In this year 1841 the great no-restraint controversy was at its height. It

raged especially in the columns of the *Lancet*. Charlesworth and Gardiner-Hill and their opponents, Cookson of Lincoln and Corsellis of Wakefield, and various anonymous contributors, "A Looker-On" and others, wrote in such immoderate and provocative terms that one is inclined to think that there had been some misunderstanding and that the term "no-restraint" was being applied to a style of journalism rather than to a mode of treatment.

In all these circumstances it was a courageous move to seek to unite doctors who were showing so much disunion into one Association. We do not know what private discussions may have preceded the issue by Dr. Hitch of his circular letter of 19 June, 1841, which was worded as follows:

"Dear Sir,

"It having been long felt desirable that the Medical Gentlemen connected with Lunatic Asylums should be better known to each other—should communicate more freely the results of their individual experience—should co-operate in collecting statistical information relating to Insanity—and, above all, should assist each other in improving the treatment of the Insane,—several Gentlemen who have the conduct of Lunatic Asylums have determined on making an attempt to form 'an Association of the Medical Officers of Lunatic Asylums'.

"For this purpose they propose to meet annually, at the time and Place 'the British Association for the Cultivation of Science' shall select for holding their Meetings; and to hold a first or preliminary Meeting this year, on the 29th July next, at Devonport.

"I have been requested by these Gentlemen to learn how far their brethren will co-operate with them; and I shall feel it a personal kindness therefore if you will, as soon as possible, give me your opinion upon this proposed Association, and also inform me if you will give it your support.

I beg to remain, dear Sir,
Your obedient and faithful Servant,
Samuel Hitch.
Resident Physician,
Gloucestershir General Lunatic Asylum."

This circular was sent out to visiting physicians and resident medical superintendents of 26 asylums and hospitals in England, 7 in Scotland and 11 in Ireland. The response was encouraging; 44 of those addressed undertook to join the proposed Association, and these represented 22 English, 5 Scottish and 4 Irish institutions. They included such well-known figures as Sir Alexander Morison and E. T. Monro of Bethlem, Conolly of Hanwell, Sutherland of St. Luke's, J. C. Prichard of Bristol and T. O. Prichard of Northampton, Gaskell of Lancaster, Browne of Dumfries, Hutcheson of Glasgow, Poole of Montrose and Stewart of Belfast.

From the minute book in which all this was recorded one may infer a certain hastiness and imperfection of method in keeping with Dr. Hitch's "bustling" personality. For instance, one hospital is recorded twice; there are misspellings; and the whole idea of a meeting in so remote a place as Devonport was unlikely to be popular. Only four of those who accepted membership were in favour of it. Accordingly the plan was changed and these four gentlemen joined with Drs. Shute and Hitch at Gloucester on 27 July in a preliminary meeting of which the following are the minutes:

"July 27, 1841.

"At a Meeting of Medical Gentlemen attached to Lunatic Asylums, held at the Gloucester Lunatic Asylum this day, for the purpose of collecting the opinions of those Gentlemen to whom the Circular of the 19th of June had been addressed, and to prepare for the Meeting proposed to be held at Devonport on the 29th inst.—

Present—

Dr. Shute, *of the Gloucester Lunatic Asylum*, in the Chair.
Mr. Powell, *Nottingham*
Mr. Wintle, *Oxford.*
Mr. Thurnam, *The Retreat, York.*
Mr. Gaskell, *Lancaster Asylum.*
Dr. Hitch, *Gloucester.*

It appeared from the correspondence produced by Dr. Hitch, that of eighty-three gentlemen to whom the circular had been addressed, *forty-seven* had replied,—that *three* had declined to belong to the proposed Association,—that *forty-four* had consented,—and that from *thirty-six* no answer had been received. That, with few exceptions, those who had replied had distinctly expressed their intentions of *not* proceeding to Devonport, whilst *none but the parties present* had positively assented to that place of meeting.

It was resolved—

That in consequence of the above facts it does not appear incumbent on those who issued the circular and convened the Meeting to proceed to Devonport.

That this Meeting considers itself competent to establish the Association proposed in the circular.

That an Association be formed of the Medical Officers attached to Hospitals for the Insane, whose objects shall be—*Improvement in the management of such Institutions and the treatment of the Insane, and the acquirement of a more extensive and more correct knowledge of Insanity.* That the Medical Gentlemen attached to Hospitals for the Insane be individually addressed and requested to join the Association.

That, by the Members of this Association, the terms *Lunatic*, and *Lunatic Asylum*, be abandoned, except for legal purposes, and that the terms *Insane Person*, and *Hospital for the Insane*, be substituted.

That to effect the great objects of this Association, visits be made *annually* to some one or more of the Hospitals for the Insane in the United Kingdom; and that the order of rotation in which such visits shall be made, be determined at the several Meetings.

That the concurrence of the Governors of the several Hospitals to this arrangement be solicited by the respective Medical Officers.

That at its Meetings the Association ascertain and record, as far as possible, the Medical and Moral Treatment adopted in each Hospital.

That to insure a careful comparison of the results of treatment in each, it is strongly recommended that uniform Registers be kept, and that tabular Statements, upon a like uniform plan, be circulated with the

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Annual Report of each Hospital; or, where this be not practicable, that it be otherwise transmitted to the Association.

That, at the Meetings, Papers and Essays be read; subjects of interest to the Insane and to the Association be discussed, and the information communicated.

That, at the Annual Meetings, the senior Medical Officer of the Hospital visited be Chairman.

That a Secretary be appointed to keep the Journals, Papers, &c., of the Association, and to perform the usual duties of such Officer.

That the first Annual Meeting be held at Nottingham early in the month of September next, of which due notice shall be given.

That Dr. Hitch be requested to act as Secretary, *pro tem.*

That these Resolutions be printed, and a copy forwarded to every Medical Officer of the Hospitals for the Insane in Great Britain, and, as far as practicable, to the Medical Officers of similar Establishments on the Continent.

Signed,
Hardwicke Shute, Chairman."

In his 1896 article Outterson Wood remarks that these resolutions "to this day remain the basis and contain the fundamental principles upon which our present Association is established". Today we should have to modify this, but only because of the increased extent of the Association's interests.

A few words may be said about the four men who with Drs. *Shute* and *Hitch* were the founders of the Association.

Samuel Gaskell was 34 years old and had been Resident Superintendent at Lancaster Asylum since the previous year. Crommelinck records the improvements which he had at once brought about in collaboration with the visiting physician, E. De Vitré, not only the abolition of most forms of restraint but also the creation of a patients' library, the opening of a new wing "of an unparalleled elegance and daintiness", the encouragement of mutual assistance among the patients and the sympathetic and liberal management of the nursing staff. Gaskell became specially interested in the idiot children who at that time were admitted to the asylum, and many years later Lord Shaftesbury described how he placed some of these children under the individual care of female patients. In 1847 his visit to Bicêtre and subsequent descriptive articles in *Chambers' Journal* were the starting point of the movement for the special training of the subnormal in this country. He was made a Commissioner in 1849, but had to resign in 1866 through ill-health caused by a street accident. During his commissionership he urged the provision—or rather the restoration—of facilities for voluntary admission and the creation of asylums for the middle classes. He died in 1886, and our Gaskell Medal and Prize was founded in his memory.

John Thurnam had been Resident Medical Officer at the York Retreat since 1838. This was a new appointment, and the change by which the medical officer became the Superintendent was not made until 1845. Thurnam was 30 years old in 1841, and his zeal and ability are well shown in the publication in the same year of his work *Statistics of Insanity*, the standard work on the subject for many years. He was a keen archaeologist, perhaps stimulated by the existence of a large prehistoric barrow in the grounds of the Retreat; this

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interest may have been his motive in removing in 1849 to Devizes as the first Medical Superintendent of the Wiltshire Asylum, and here besides adding to his reputation as a wise and painstaking physician he found full scope for antiquarian research. From 1856 to 1865 he was joint author of the classical *Crania Britannica*. He died in 1873.

F. T. Wintle was Resident Superintendent of the Warneford (formerly the Radcliffe) Asylum at Oxford. No biographical details of him are available except that he died in 1853, but he was evidently highly thought of, for on the retirement of the Visiting Physician, Dr. Ogle, the Regius Professor, it was decided that Dr. Wintle should be placed in sole charge on the grounds of his thorough knowledge of mental diseases. As will be mentioned later, he was specially interested in the use of drugs in psychiatry.

Thomas Powell was Medical Superintendent from 1831 to 1848 of the Nottingham Asylum whose origins have already been described. Here again we are dependent on Crommelinck for some account of his methods. He seems to have delighted in ingenious devices of all kinds, from the installation of a multi-purpose steam engine and boiler to the spreading of sugar on a young patient's pillow as an inducement to her to sleep in a bed rather than on straw. At the time of the visit he had just done away with the protective wire netting to the ward windows, with excellent results.

It was Powell who invited the newly-formed Association to hold its first Annual Meeting at his asylum, but the date had to be postponed, and the meeting was actually held at Nottingham on 4 November, 1841.

Meanwhile Hitch had invited Crommelinck to become a member of the Association and to attend the Nottingham meeting, to which he readily agreed —his name appears among the other acceptances. Consequently we are fortunate in having embodied in Crommelinck's report a first-hand account of the meeting, giving a vivid picture of how our earliest members conducted their business.

In re-publishing this unique report it must be pointed out that the speeches attributed to members have been translated back from the French, but the list of those present and the resolutions are quoted as they appear in the minutes.

In accordance with the order of seniority then existing, the Chair was taken, not by Powell, but by the Visiting Physician, Dr. Andrew Blake. He was an aged man and a sufferer from asthma; in the previous year he had brought out a second edition of *A Practical Essay on Delirium Tremens*. He retired shortly after the meeting and died a year or two later. Hitch, as arranged, acted as Secretary, and the following were present:

Dr. Blake (in the Chair), Nottingham Asylum.
Dr. Corsellis, of Wakefield.
Dr. Crommelinck, Bruges, Belgium.
Mr. Gaskell, Lancaster Asylum.
Dr. Hitch, Gloucester.
Dr. Prichard, Northampton.
Mr. Powell, Nottingham.
Mr. Prosser, Leicester.
Dr. Shute, Gloucester.
Mr. Smith, Lincoln.
Mr. Thurnam, York Retreat.
The Rev. R. W. Wilson, Thomas Close, Esq., Dr. Bowden, Hanwell. } Governors of the Nottingham Asylum } Visitors.

Now follows Crommelinck's account:

"The members assembled at 9 a.m. on Thursday, 4 November and on Mr. Powell's proposal it was decided that before the opening of the session there should be a thorough inspection of the institution, with an examination of every detail, and members would make their comments on the spot and express any criticisms they might deem proper, however severe these might be. The Visiting Justices were specially invited to accompany the doctors on this tour of the hospital, to which one might well apply the term 'inquisitorial'. It was further decided that in future every meeting would be preceded by a similar official scientific visit. Not a single corner of the building and not a single patient escaped the scrutiny of these experienced men; everything was discussed and everyone brought forward in argument the results of his long experience. Let me say in passing that, to give Englishmen their due, their discussions are free from misplaced vanity or professional jealousy; contributions are serious and weighty, and no one speaks unless called on by the Chairman. During the two days of the meeting not a moment was lost in idle questioning or in personal dissensions.

"A very important decision was taken unanimously. It was agreed that every subject under argument would be put to the test by each member and would be reported on at the next meeting; and, whatever might be the results of these collective experiments, each member would undertake to abide by them, that is, for instance, to abandon the use of such and such means of treatment or else to adopt it as a regular practice. Thus, various instruments and appliances for the use of patients were proposed by different members, and it was agreed that everyone present would give them a trial and report the results at a subsequent session.

"The presence of members of the Hospital Committee rendered the meeting of immediate benefit to the patients. The doctors were unanimous in condemning certain features of the institution, such as the defective ventilation on the ground floor and the excessive cold resulting from the flagstoned floors. Such weighty opinions coming from a group of experienced and disinterested men, and reinforcing Mr. Powell's own repeated requests, could not fail to influence the Justices, who ventured to anticipate the decisions of the full Committee and promised that these disadvantages would be remedied before long.

"After this tour of the hospital, which lasted for four hours, members assembled in the main hall and the Chairman opened the session with a short but forceful address in which he recalled the purposes for which the Association had been formed. He said that much had been done in recent years for the insane but much more remained to be done; there were two powerful obstacles to progress. The first was the difficulty universally experienced where it was necessary to eradicate old prejudices and overthrow traditional ideas. The second, thanks be to God, was now about to disappear. Until now a few men of goodwill—and this included all those present—had made great and praiseworthy efforts, each in his own department, towards improving the care of the insane; each one had achieved considerable success in the circumstances in which each was placed but none had reached a degree of perfection which would justify him in believing there was no more to be done; for each one had been working in isolation, and the care of the insane was not a problem which could ever be solved by one man. Here, more than with any other problem, there was need for a combination of a number of experiences over a number of years. Those present had for long felt this need to unite their talents and forces, and they had now crossed the barrier which had hitherto prevented the realization

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of their wishes. He thanked God for having permitted him to enjoy, at the end of his long career, the pleasure of presiding over a gathering which fulfilled one of his cherished dreams.

"The rest of the two-day meeting was devoted to the discussion and adoption of the rules and constitution. The following resolutions were passed, and were printed the next day and copies distributed to the members:

That the Governors of the institution at which the Association shall hold its Meetings be invited by the Medical Officers thereof to be present at the discussions.

That in the Resolution, No. 3, of the Meeting of July 27th, 1841 the expression 'Medical Officers attached to Hospitals for the Insane', be meant to include Medical Gentlemen attached to Private, as well as Public, Asylums.*

That Gentlemen desirous of becoming Members of the Association be proposed by two Members, for election by ballot; and that notice of such proposition be sent by the Secretary to each Member one month previous to the time of election.

That ballot papers be furnished by the Secretary to each Member of the Association, which shall be filled up, and either transmitted to the Secretary, or deposited with him at the time of meeting.

That at the election, a majority of two-thirds shall be requisite for the admission of each candidate.

That in Resolution No. 4, of July 27, the word 'official' be added to that of 'legal'.

That Dr. Shute be requested to act as Treasurer.

That the Annual Meetings be held on the first Thursday in June of each year.

That Dr. Shute, Dr. Corsellis, Mr. Thurnam, and Dr. Hitch, be a Committee, to consider the best form of Registers and Tabular Reports, as recommended in the Resolution, No. 8, of July 27.

That this Association, as it may think proper, shall select as Honorary Members, gentlemen, whether medical or otherwise, who shall have distinguished themselves by the particular interest they have exhibited in the subject of Insanity.

That Mr. Samuel Tuke, of York; Mr. Farr, of London; Dr. Bowden, of Hanwell; and Dr. Guislain, of Ghent, be now elected Honorary Members.

That the Annual Subscription be one guinea, to be paid in advance at the Annual Meetings.

That it is desirable that plans be collected by and for the Association of all Hospitals for the Insane; and that such consist, as far as possible, of elevations, ground plans, sections, drains, means of warming and ventilating, &c. &c.; and that they be accompanied with descriptions of the site, soil, neighbourhood, &c. of the Hospital; and that they be reduced to a scale of forty feet to one inch.

* Crommelinck says that he tried in vain to persuade members to adopt the term "Phrenopathic Institution".

That without pledging themselves to the opinion that mechanical restraint may not be found occasionally useful in the management of the Insane, the Members now present have the greatest satisfaction in according their approbation of, and in proposing a vote of thanks to, those gentlemen who are now engaged in endeavouring to abolish its use in all cases.*

That the Chairman be requested to express to the Secretary of State the opinion of this Meeting, that for the benefit of the Insane poor, the word 'dangerous' should be omitted from the 45th Section of the Poor-law Amendment Act; when that measure shall be again introduced to the consideration of the Hon. Members of the House of Commons†.

That the warmest thanks of the Association be offered to the Governors and Medical Officers of the Nottingham Asylum, for their kindness in inviting the Association to hold its first Annual Meeting at that establishment; and for their kind entertainment of its Members whilst there.

That the next Annual Meeting be held at Lancaster.

That the thanks of the Meeting be given to Dr. Blake, the President of this Meeting, for his kindness and attention on this occasion.

"In a closing speech the Secretary, Dr. Hitch, pointed out to the members that their lively desire to hasten the moment when they could unite their forces for the benefit of their patients had caused them to overlook the fact that they had arranged the meeting at a time of the year when travel was difficult, if not impossible, for a majority of their colleagues, especially for those working in Scotland and Ireland. That was why only a dozen members were present; but he was glad to say that about 60 other medical men had written to him to say that they would agree in advance with anything that was decided by those present, and that they would not fail to attend in future. The place chosen for the next meeting, on the cordial invitation of Mr. Gaskell, was an especially favourable one, since Lancaster was central for the three kingdoms, and a date in the summer would be favourable to Scottish and Irish members. Several members had sought the honour of receiving the Association in their hospitals, but he was glad that preference had been given to Lancaster. Since the members' visit had had such a happy influence on the Nottingham magistrates they might hope, with Mr. Gaskell, that their remarks and representations might plead just as successfully for the improvement of the hospital at Lancaster, which Mr. Gaskell had told them was one of the least favoured in the country.

"Finally he thanked Dr. Crommelinck for the honour he did them in attending their meeting. Since he had accepted active membership of the Association, they hoped that he would succeed in the work he was doing in his own country with the same object as their own—in spreading the spirit of common effort from which so much benefit would result. They hoped that at further meetings other distinguished men of science would join them, and foreign governments would send representatives, and the Association for its part intended to send a representative to any meeting of a similar character held in

* An excellent compromise resolution. Among the members present, T. O. Prichard, of Northampton, was an absolute non-restrainer, while Corsellis, of Wakefield, had been an active participant in the *Lancet* correspondence on the "occasional restraint" side.

† Crommelinck adds: "In regard to the last resolution, there was much discussion on the tardiness of Poor-Law Guardians in sending their insane poor to the institutions provided for them, and much indignation was expressed by all members." The Guardians were using the wording of the Poor-Law Act as a pretext for retaining in the workhouses patients who were not "dangerous".

another country. Misfortune was of all countries; science was of all countries; neither knew anything of the arbitrary political boundaries which had been imposed upon the different peoples of the world."

A word may be added here about the subsequent history of the Nottingham Asylum. As at Gloucester, the union between the subscribers and the County was dissolved, and in 1859 "The Coppice" was opened as a registered hospital. In 1881 the City of Nottingham built its own asylum at Mapperley. The old building at Sneinton, though becoming increasingly obsolete, continued to serve the County until 1902, when the present Saxondale Hospital took its place. One wing was pulled down, but a large portion has survived as the Dakeyne Street Lads' Club and the basement cells and other vestiges of its past can still be inspected.

Hitch's optimistic forecast of a large attendance at Lancaster in June, 1842 was not realized. The number of members present was no greater, and it is not stated that any of the Lancaster Visiting Justices attended; nevertheless the meeting sent them their congratulations on the improvements already effected. Presumably these improvements include those recorded by Dr. Kathleen Jones in her *Lunacy, Law and Conscience*—a sudden rush of buying—hardware, kitchen utensils, soap, candles and scouring liquors; between May and September £243 were spent on blankets, and indents for straw stopped completely. Gloucester had been four years ahead in doing away with straw bedding.

Postponing for the moment any mention of papers read at meetings, which may best be considered together, we pass to 1843, when for the first time the Association met in London, first at Morley's Hotel in Trafalgar Square, and on subsequent days at Hanwell, the Surrey Asylum (Springfield Hospital) and at St. Luke's Hospital. Notwithstanding the support of Sir Alexander Morison and Dr. Monro, the Governors of Bethlem refused the Association's request to visit the hospital. The attendance was still very small, but for the first time an Irish member was present, Dr. R. Stewart of the Belfast Asylum; he was appointed the Association's Secretary for Ireland and served in that capacity for many years. At his and other Irish members' suggestion Dr. Hitch had addressed the Government on the want of Resident Medical Officers in the larger Irish asylums, and the meeting recorded their opinion that "nothing can be more detrimental to the comfort and welfare of the insane than confiding the entire superintendence of asylums to those who are not members of the medical profession". An attempt by Dr. Corsellis of Wakefield to urge the inclusion in the Lunacy Laws of some provision for pensions for asylum officers was not supported.

At this three-day meeting, as at others up to 1853, a chairman was elected for each session, generally the member acting as host where the meeting was held at a hospital in accordance with the original resolutions. Thus for 1843, Conolly, Morison and Sutherland are equally entitled to figure in the list of Chairmen. At this meeting also a large number of Honorary Members were elected and as there is some significance in their choice, we may consider these together with the smaller number elected in earlier and later years.

Our first Honorary Member, elected at the Nottingham meeting, was most appropriately Samuel Tuke, whose *Description of the Retreat* had exercised such a profound influence nearly 30 years earlier; in the same year, 1841, he had set out his mature ideas on the principles of asylum treatment in his Introduction to the translation of Jacobi's work on the subject. With him was

also elected William Farr, the founder of statistics as applied to public health. In the next three years eminent psychiatrists in France, Germany and the United States were elected, notably Baillarger, Calmeil, Falret, Foville and Leuret; Heinroth, Jacobi and Julius; Kirkbride, Pliny Earle and Woodward. At home Honorary Membership was awarded to Professor Alison of Edinburgh and to the Rev. D. Warneford, to whom a special resolution of thanks was accorded for his benefactions at Oxford. But perhaps the most notable name on the list is John Haslam, who received this honour in his old age evidently as a mark of respect for a veteran of the specialty and notwithstanding his recent unrepentant support of the use of mechanical restraint.

In September, 1844 a fourth meeting was held in York, with sessions both at the Retreat and at the York Asylum (Bootham Park). Still only a handful, the members included for the first time one of the Commissioners, none other than James Cowles Prichard of Bristol, who at the members' request, agreed to take up with Lord Ashley certain matters of administration. Samuel Tuke also came to the meeting and spoke on the subject of asylum construction.

After this there is a gap; meetings become irregular, and it is evident that the Association was not flourishing as had been expected. Nevertheless, the meeting held at the Warneford and Littlemore Asylums at Oxford in 1847, under Drs. Wintle and Ley, is of interest, for it is here that the idea of publishing a journal was first discussed. In France the *Annales Médico-Psychologiques* had been founded by Baillarger in 1842, and in 1844 Professor Damerow, of Halle, had presented to our Association the first number of the *Zeitschrift für Psychiatrie*, although neither country had yet formed a psychiatric Association. At the Littlemore meeting the discussion resulted in a resolution "that it is desirable that this Association should issue from time to time a volume of contributions relative to Insanity in particular and to Psychology in general". However, the Committee appointed to carry out this plan were quite unsuccessful. The issue of an Association journal was anticipated by that remarkable example of private enterprise, Forbes Winslow's *Journal of Psychological Medicine*, first published in 1848*.

We may now take a look at the few papers read at these early meetings. Again very appropriately, the first was presented by Thurnam in 1842 and was entitled "On the precautions necessary in reporting statistical observations". At the 1843 London meeting Oliver of Carlisle read a paper on "The expediency of a general method of recording the morbid appearances in the bodies of the insane". De Vitré of Lancaster spoke on "the necessity for an extended legislative provision for persons of unsound mind"—which was in fact introduced by the Acts of 1845; and his colleague Gaskell in 1847 presented a plan of asylum construction "advocating great separation and detachment of buildings".

On the clinical side, Crosse of Norwich read a paper at York in 1844 on "Homicidal Mania". We may find more interesting Wintle's eager advocacy of his favourite remedies, creosote as a stimulant and opium and hyoscyamus as sedatives. At the London meeting he "directed attention to the value of creosote in doses of three minims and upwards in cases of dementia, in which it gives tone and acts altogether beneficially". By "dementia" he evidently meant "dementia praecox" for his ideas are more fully set out in the extensive review of current therapics included in the Commissioners' Report for 1847, and here he refers to apparently hopeless cases of dementia "coupled with or depending on masturbation" in which "recovery took place under the per-

* Often referred to colloquially as the "Psychological Journal".

severing use of creosote and the shower-bath after every other form of tonic and stimulant had been given in vain". At the same time Dr. Wintle wished "that the success which had attended Dr. Ogle's and his own use of opiates should be named". At York two years later Wintle again addressed the meeting on "The use of opium and narcotics generally in the treatment of acute mania". Wintle's initiative brought out further therapeutic contributions from other members, and it is recorded that Dr. Hitch spoke of the efficiency of iodine and its compounds in the depression consequent on mania, and that Dr. Sutherland "referred to the value of carbonate of soda in nymphomania and cited cases".

There is another unfortunate gap between 1847 and 1851, and we may take the opportunity to follow briefly the later career of Samuel Hitch. In 1845 he and Mrs. Hitch expressed their wish to retire from the offices of Superintendent Physician and Matron in consequence of the impaired state of their health. It is evident, however, that as far as Dr. Hitch was concerned he was only asking to be relieved of the single-handed everyday burden he was carrying—they included also the duties of Clerk to the hospital—and intended to develop a private practice. The Committee agreed to set up a three-tier system with Dr. Hardwicke Shute continuing as Visiting Physician on a "once-a-week or as required" basis. Dr. Hitch became non-resident Physician with the duty of visiting the asylum daily and seeing all the patients: he was to be medically responsible for their treatment and care and "the direction and supervision of their management", and he was given liberty to take private patients on his own account. A new appointment of Resident Medical Officer was created to take the care and management of the patients under the direction of the Physician, "superintend the general economy of the asylum and undertake the statutory duties of Clerk".

By this time asylum practice had developed sufficiently for the Visiting Justices to be able to insist on previous experience in candidates for both the Resident Medical Officer's and the Matron's posts. The new Medical Officer, Dr. J. E. Huxley, did not remain long at Gloucester; in 1846 he was appointed Superintendent at the Kent County Asylum; and there was an interval during which Dr. Hitch resumed full control, after which Dr. W. W. Williams was appointed.

Williams must have rapidly gained Hitch's confidence, for at the Oxford meeting in 1847 the latter proposed him as joint Secretary with himself of the Association, evidently with a view to the succession. Later in the same year Hitch decided to take the step of opening a Licensed House of his own, and he acquired the mansion of Sandywell Park near Cheltenham for the purpose. He now finally resigned his connection with Gloucester Asylum. Again confidence was shown in Dr. Williams' ability, and he was entrusted with the entire management of the asylum as Resident Physician.

In 1849 Hitch organized a collective address of congratulation to Gaskell on his appointment as a Commissioner. This, with a list of signatories, is entered in the minute book; the number of signatories (31) is probably well below the total membership, but the list is interesting as mentioning for the first time some names that later became very prominent in the Association's affairs, such as Bucknill of Devon, Boyd of Somerset and Hitchman of Hanwell and afterwards of Derby.

Hitch submitted his resignation as Secretary at the meeting held in London in 1851. He was invited to continue in office as Treasurer and did so until

1854, but it does not appear that he attended any of the meetings held during this period. He finally resigned office in 1854, when he was succeeded by Ley of Littlemore.

There is a curious legend about Hitch's relations with the Association, which was given currency by Dr. Greig Soutar when he spoke as President at the Annual Dinner in Gloucester in 1912. It is to the effect that "the Association was discarded and disowned by its parent", in that Hitch, without any explanation, suddenly ceased to take any interest in its affairs, and that the reason eventually turned out to be a slur cast on the manner in which the Association had been formed. One of the Association's Presidents (whom I have ascertained to have been Dr. Hitchman of Derby) had suggested that it had come into being at a convivial gathering; and Hitch had taken offence.* As related by Dr. Soutar, peace is said to have been restored by "the good Dr. Hack Tuke" who tactfully elicited the cause of Hitch's displeasure and restored peace by publishing the true facts. I have not been able to trace any such publication in our Journal —Hack Tuke's brief sketch of our early history did not appear until 1878; and from the minutes it is evident that Hitch had ceased to attend several years before Hitchman's unfortunate *faux pas*.

At Sandywell Park Hitch had as partner and assistant first a Dr. Bush and later a Mr. J. V. Wood. He does not seem to have lived in the house. A description of all provincial Licensed Houses appears in the Commissioners' Report for 1862 and here the house is described as large and handsome, well maintained and catering for about 30 patients of the upper classes. The Commissioners "highly approve the practice of allowing about 15 or 16 patients of both sexes to dine together daily".

In 1864 Hitch gave up the house, and the licence was transferred to Dr. W. H. O. Sankey, previously one of the "Medical Superintendents" at Hanwell. Hitch retired to Southwick Park near Tewkesbury. His name ceases to appear in the list of members of the Association after 1871. He died at Eastbourne in 1881; his death seems to have attracted no attention and no obituary notice appeared in our own or in the leading medical journals.

Meanwhile the Association was experiencing a revival and was able to muster an attendance of as many as 26 of its members at the meeting held in July, 1851 at the Freemasons' Tavern in London under the chairmanship of John Conolly. On succeeding days members visited the newly-opened Colney Hatch Asylum, the asylum for idiots at Park House, Highgate (shortly to be removed to Earlswood) and, for the first time, Bethlem Hospital. Dr. Forbes Winslow also received members at his own private asylum, Sussex House in the Fulham Palace Road. A Committee, with Forbes Winslow as Secretary, was appointed to consider possible revisions of the Lunacy Acts—the forerunner of our Parliamentary Committee.

A still more fruitful meeting was held at Oxford in 1852 under Dr. Wintle.

* Dr. Hitchman, speaking at the Association's Annual Dinner in Derby in 1855 (the first held), said: "Our Association is of tender years; it dates its origin from the social intercourse of a few friends under the hospitable roof of Dr. Hitch—from an assembly of gentlemen having kindred pursuits, like aims, like anxieties and like hopes. It was in the beginning a social festival at which laborious men forgot for a while their anxious daily task and luxuriated in the sympathy of their brethren . . . some of the members felt that the Association should enlarge its aims and become the representative and exponent of psychological science."

There is a suggestion here that the Association had remained a mere "social festival" after it had been formally constituted, not merely that it had originated from informal gatherings. The records, as has been shown above, give no support to this.

Here at last it was resolved to venture on the publication of a Journal. The minutes record that "Mr. Ley ably advocated the establishment of a Journal and submitted to the meeting several propositions connected therewith. Dr. Bucknill addressed the meeting at considerable length on behalf of Mr. Ley's propositions, in which he was supported by Dr. Conolly. An interesting discussion ensued and it was resolved on the motion of Mr. Ley, seconded by Dr. Thurnam, that the Journal be undertaken and that Dr. Bucknill be appointed the Editor."

The *Asylum Journal*, to give it its original name, duly made its appearance in November, 1853. For the contents of its first number and an abstract of Bucknill's introductory "Prospectus" I had intended to refer entirely to the note published in the Centenary Number for October, 1953. However, I feel that I must single out one passage for special mention here since it has been misquoted and a wrong meaning attributed to it by Dr. Kathleen Jones in her recent book on *Mental Health and Social Policy*.

Dr. Jones quotes Bucknill as follows: "Insanity is purely a disease of the brain. The physician is now the responsible guardian of the lunatic and must ever remain so". And she concludes from this that the *Journal* (and the Association) was inclined to resent any lay intervention in their field.

But what Bucknill actually wrote is this: "Pinel vindicated the rights of science against the usurpations of superstition and brutality and rescued the victims of cerebro-mental disease from the exorcist and the gaoler. But their victory was not gained in one battle; the struggle was carried on with undulating success until in this country the good work was definitely consummated by the labours of Conolly. The physician is now the responsible guardian of the lunatic and must ever remain so unless by some calamitous reverse the progress of the world in civilization should be arrested and the world turned back into practical barbarism."

It is thus evident that Bucknill was contrasting the physician with "the exorcist and the gaoler" of past times, and no doubt had also in mind the workhouse master and the close-fisted poor-law guardians of his own time; but certainly not the enlightened laymen such as Tuke and Ashley, whose friendship the Association had sought from the time of its first meeting. Bucknill's praise of the Justices of the Peace and his call for a "humane, intelligent and disinterested executive" at the 1854 meeting is further evidence that the charge of professional exclusiveness has no real foundation.

This meeting, held in London in June, 1854, under Dr. A. J. Sutherland, was the first of an unbroken sequence which has lasted to this day. It is the first to be reported in the Journal, and so, following the example of Dr. Outterson Wood, I will make it the last to be recalled here. Although only 13 members were able to attend, the full membership was much larger—121 are named in the list printed in the Journal in 1855.

Williams of Gloucester was still General Secretary, though in the following year he was replaced by Dr. Lockhart Robertson who retained the office for many years. The Presidency dates from the same meeting, for it was then resolved that the Chairman at the Annual Meeting should be President of the Association for the ensuing year.

The meeting also decided on the creation of a permanent Parliamentary Committee. In spite of the appointment of the Special Committee on the Lunacy Laws two years previously, complaint was made that apart from the personal action of Dr. Forbes Winslow the Association had not been active enough in aiding the labours of those entrusted with the passing of the Acts of

1853. Further, both Ley and Bucknill drew attention to proposed legislation which they saw as a threat to the standards already reached in the asylums. This was the proposed creation in each county of an elected Financial Board —a proposal which in fact did not materialize at the time, but which foreshadowed the establishment of the County Councils thirty years later. The members felt that elected Boards would be as harsh and miserly in their attitude towards the insane poor as were the Boards of Guardians set up under the Poor-Law. Bucknill spoke of the "unutterable misery inflicted upon this class of sufferers from motives of economy, so long as their care and maintenance was entrusted to parochial officers". He praised the Justices of the Peace as the most educated, humane and disinterested men to be found in country districts and therefore the best fitted to carry out the intentions of the legislature. A Committee was accordingly appointed and a Parliamentary agent engaged to give them notice of impending proceedings.

Further discussion took place on the question of co-operation between members in the engagement and discharge of "servants and attendants" and it was resolved "that members pledge themselves not to engage any person who has been in service in any other asylum without a character from that asylum, and undertake to afford each other a full and faithful account of the qualifications and character of persons who may have been under their control".

On the proposal of Dr. Macintosh of the Glasgow Royal it was decided to set up a branch of the Association in Scotland—a necessary and fruitful step since up till then the Association had only been able to enrol a handful of Scottish members. Dr. W. A. F. Browne became the first Scottish Secretary.

The last and a pleasant item of business at this meeting was Bucknill's first report on the *Journal*. This has already been quoted in the Centenary Number, but an additional quotation may be apposite: "Dr. Bucknill said that having applied to his friend Mr. Ley for a paper he had received in return a bank-note for £5!" It is no wonder that earlier in the proceedings Bucknill had proposed Ley as the new Treasurer and this had been carried unanimously! It is pleasant to record also that Forbes Winslow, who previously had taken offence at the competition apparently offered to his own *Journal of Psychological Medicine*, declared himself as completely reconciled and satisfied with what had been done.

Paraphrasing the Book of Kings, we may say that "as to the later history of the Association, and all that its members did, and all their might, is it not written in the pages of our *Journal*?" The Book, it is true, is apt to add some rather discouraging phrase such as "he slept with his fathers" or "he became diseased in the feet". It is for us to see that our Association neither sleeps nor becomes diseased, and it may give us some refreshment and inspiration to recall on occasions something of our origin, and of the principles and ideals of our Founders.

CYCLOID PSYCHOSES—ENDOGENOUS PSYCHOSES WHICH ARE NEITHER SCHIZOPHRENIC NOR MANIC-DEPRESSIVE*

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KRAEPELIN'S diagnostic classification of the endogenous psychoses received world-wide acceptance, but today it is generally considered to have failed and is at times rejected by some workers with a few scornful words. This is not due to Kraepelin's own work but is the result of the way in which his successors have used his concepts. Kraepelin himself was not satisfied with the rough division of the endogenous psychoses into the two forms of manic-depressive insanity and schizophrenia, or as he termed it, dementia praecox. He, in fact, never ceased trying to isolate more disease entities. Thus, for example, he differentiated a large number of special forms of schizophrenia. Although he defined the two major groups of endogenous psychoses, this did not mean that he limited the number of diagnostic categories. On the contrary, he investigated all special forms of mental illness very carefully. If he saw a clinical picture which was unknown to him he would say, "So far I do not know this clinical picture, we should describe it adequately, perhaps other cases will occur as well, which will allow the isolation of a characteristic clinical picture."

Kraepelin's successors behaved quite differently. They merely fastened on to the division of the endogenous psychoses into two groups. They did not prevent this diagnostic scheme from becoming a rigid one which could not take into account the fine details of clinical observation. In Germany only a few psychiatrists took a different attitude. Wernicke, who died so prematurely, developed a very finely differentiated symptomatology of the endogenous psychoses. This did not take into account Kraepelin's aetiological principle, but despite that it allowed a more adequate description of the psychiatric syndromes. Kleist constructed a system on the basis of Wernicke's ideas, but used the aetiological principle as well. He was able to isolate many of Wernicke's syndromes as distinct forms of psychological illness. These highly differentiate forms of illness could only partly be allotted to one or other of Kraepelin's two major groups. Schröder grouped together all those forms which did not fit into the older classification and called them degeneration psychoses. Although Kleist accepted Wernicke's neuropathological approach, it is still possible to use the clinical descriptions of both Kleist and Wernicke and yet not to accept the supposed cerebral basis of the illnesses. In my own systematology of the endogenous psychoses I was able to use the views of Wernicke and Kleist as a basis for my work without accepting their neuropathological interpretations. I have tried to confirm my views by genetic research, in which I have investigated the family patterns of pyschosis.

* Lecture given at the Royal Edinburgh Hospital for Nervous and Mental Disorders on 27 June, 1960, at the invitation of Dr. T. A. Munro. The author wishes to thank Dr. Frank Fish, Senior Lecturer, Department of Psychological Medicine, University of Edinburgh, for the translation.

In Anglo-American literature today not only are Kraepelin's views considered to be outdated, but all attempts at diagnosis in which the clinical picture is the essential factor are rejected. This attitude particularly applies to schizophrenia rather than to manic-depressive insanity or to the other phasic psychoses. If one attributes the endogenous psychoses to faulty development of the personality, which began in childhood, then it is difficult to see how this concept can be applied to the phasic psychoses. One cannot explain how a personality development, which began many years before, can lead to the sudden appearance of a psychosis which then remits and recurs without any obvious reason. I am in a fortunate position in that I am only going to discuss those psychoses which run a phasic course. So that even although I am writing in English I can leave the psycho-analytic interpretation of the endogenous psychoses on one side.

Since the present-day concept of schizophrenia is rather wide, the phasic psychoses, which I want to discuss, are considered by many authors to be schizophrenic. In the past when the concept of dementia praecox was somewhat restricted, this was not so. Recently, it seems, there had been a tendency to return to a more limited concept of schizophrenia. Here I need only mention the work of Rümke and Langfeldt. In particular I would like to point out that I am in agreement with Langfeldt when he excludes many endogenous psychoses from the schizophrenic group. I believe, however, that these psychoses can be described more precisely. The most important of these disorders are the so-called cycloid psychoses.

Kleist introduced the concept of the cycloid marginal psychoses, which are also called cycloid psychoses. He did this in order to designate those illnesses which, he believed, were neither schizophrenic nor manic depressive but which were closely connected with manic-depressive insanity. In his most recent publications he has given up this concept. However, I myself have developed it and I have described an anxiety-elation psychosis in addition to the motility and confusion psychoses of Kleist. I would like to discuss these three forms of psychosis.* I will quote extracts from clinical descriptions and case histories which, I think, will demonstrate that we are not dealing with manic-depressive illnesses. I hope also that it will be obvious that these illnesses are not schizophrenic. For me this is not a matter of some special diagnostic label, since it does not matter what names are used for these psychoses. However, as I understand it, the diagnosis of a mental illness includes a prognosis. When the diagnosis of cycloid psychosis is made, then it necessarily follows that a complete remission will occur and even if the illness recurs no defect will be left behind. This is, without doubt, very important. Today, with the customary rather wide concept of schizophrenia, the prognosis of the illness is for the most part an open question. This not only gives rise to scientific difficulties but is distressing for the relatives of the patient, who are usually very anxious to know whether the disorder will improve or not. Consequently it is of practical importance to be able to recognize the cycloid psychoses. Of course mistakes can be made and mis-diagnosis occurs. In this case a supposed motility psychosis, confusion psychosis or anxiety elation psychosis develops into a defect state. However, this rarely happens. In general, if these forms of psychosis are recognized a reliable prognosis is possible. When the wrong diagnosis is made in these atypical psychoses the condition mis-diagnosed is not simply schizophrenia but "atypical schizophrenia". This is a special group of schizophrenias which

* The origin of these concepts of illness has not been very adequately dealt with in the literature. A more adequate discussion is to be found in my book *Aufteilung der Endogenen Psychosen.*

differs from the "nuclear group" of schizophrenias in that the illness has a favourable course. A mis-diagnosis of this kind is, therefore, not completely inaccurate from the prognostic point of view. When I discuss the differential diagnosis of the cycloid psychoses I shall be obliged to refer repeatedly to these atypical or non-systematic schizophrenias. However, confusion between cycloid psychoses and schizophrenias of the "systematic" group does not occur.

I will begin my more detailed presentation with the motility psychosis.

I. The Motility Psychosis

This illness has a hyperkinetic pole and an akinetic pole. Whereas manic depressive illness affects thinking, affectivity and psychomotor activity in the same way, motility psychosis is a pure psychomotor illness. Hyperkinesia or akinesia occurs, depending on the direction of the change in psychomotor activity. In either case the change is essentially quantitative, i.e., an excess or deficiency of activity. The way in which movements are carried out is not qualitatively disordered. This is in contrast to periodic catatonia. I will discuss this important point later in more detail. The increase or decrease of motor activity concerns the reactive and expressive movements, that is, those forms of movement which are based in psychomotor activity itself and which do not need conscious consideration or intention. Accordingly these patients, when they are hyperkinetic, relate to all events in the environment. They look at everything, listen to everything and handle everything. They also produce a large number of expressive movements, facial expressions and gestures and may even utter expressive words spontaneously. Both forms of movement cease in akinesia. Even the necessary reactions to external events and to bodily needs may be absent. Facial expressions and gestures become stiff. In complete akinesia the patient is almost motionless.

I will now describe a case of hyperkinetic motility psychosis:

Helga K. was born in 1940 and had no relatives who had suffered from mental illness. Her childhood development was normal. Menarche, however, occurred at the age of seventeen. Her father was killed in the war. Her mother lived quite happily with the two children of the marriage. The patient went to the ordinary school and to a commercial school, where she passed the examinations and qualified as a bookkeeper without much difficulty. She was always well-balanced and on the whole she had a cheerful nature. There was, however, a change in her behaviour at the end of 1959. At work she could not concentrate any more. She often left her desk and gave advice to her colleagues in other parts of the office. Frequently she wept and then laughed for no apparent reason. Although she was advised to report sick she carried on working. There was also trouble at home. For example, she went out for a walk on one occasion and returned at 6 a.m. the following morning. She had been to a carnival where for a time she had worked the percussion instruments. On another occasion she was arrested by the police when wandering in the middle of the night and could not give a reasonable account of herself. Finally on 9 February, 1960 she was admitted to H. Mental Hospital. On the way to hospital she was excited and expressed ideas of persecution.

She was also restless in hospital. Her behaviour was free and easy, and although she laughed she was also somewhat irritable. Later she expressed ideas of reference of an erotic kind and reported dreamlike experiences. She also claimed to have given birth to twins. She became even more disturbed, she took her bed to pieces, tore her underclothes, danced, sang and sometimes beat her head against the wall. A diagnosis of hebephrenia was made. On 27 February, 1960 she was transferred to our clinic at the request of her mother.

At the time of admission she showed psychomotor excitement and produced many gestures and facial expressions. She beat time in the air and explained that she wanted to become a conductor and to have an orchestra with the finest musicians in the world. In addition, she took up expressive poses pretending to be arrogant, angry or coquettish. She slapped the doctor on the shoulder. When told to behave quietly, she sat down on a chair and took up a pose of modesty. However, she soon stood up again, walked to the typewriter and began to use it. Meanwhile, she made such remarks as "you are a nice boy", "I have become a shorthand typist", "I would prefer to make music". She mostly produced these words very quickly in a tone of command. Figures 1 to 4 show how the patient acted before the camera. These motility psychoses are difficult to photograph at the height of excitement. Either they are so

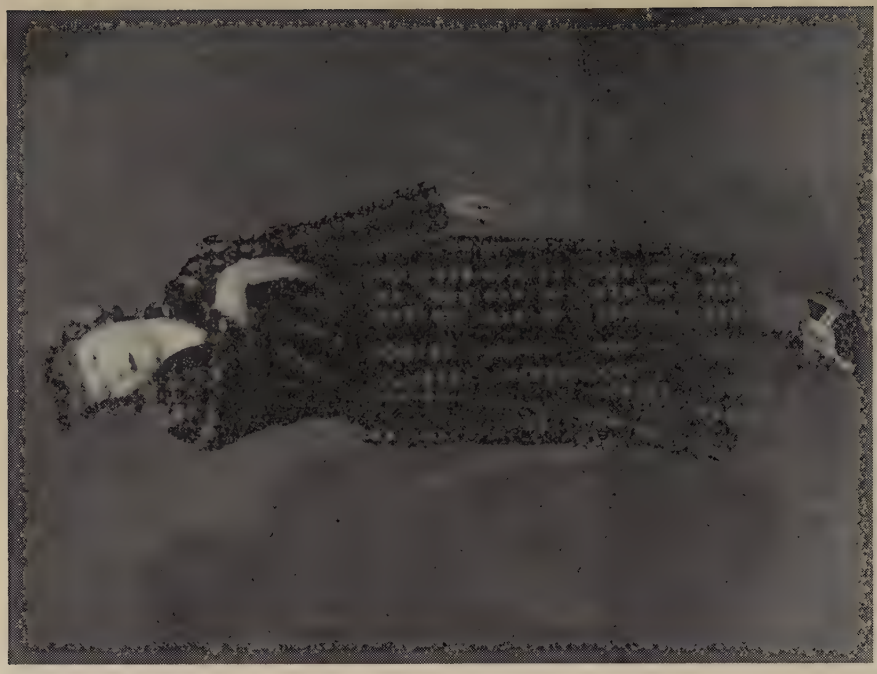

FIG. 2.—Hyperkinetic Motility Psychosis.

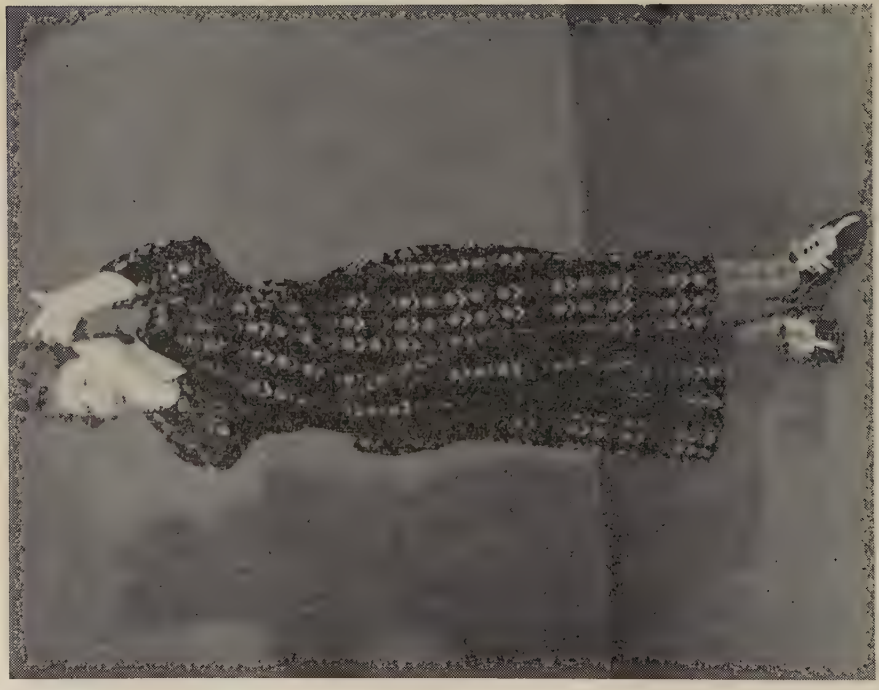

FIG. 1.—Hyperkinetic Motility Psychosis.

FIG 3.—Hyperkinetic Motility Psychosis.

FIG. 4.—Hyperkinetic Motility Psychosis.

restless that it is impossible to follow them with a camera or if they can be fixed in one place the restlessness disappears. When these photographs were taken the patient was made to stand in the same place. Consequently, the marked impulsive and non-volitional quality, which is characteristic of all the movements, cannot be recognized in these photographs. One could think that this patient was probably a manic but it must be remembered that this method only allows the presentation of some aspects of the case. However, in every case these photographs demonstrate the fact that the movements take place in a natural, graceful way and do not show any distortions.

On 15 March, 1960 I presented this patient at a lecture. At this time she showed the following clinical picture. She was smiling when she came into the lecture theatre and behaved as an equal of the nurse. Then she broke free from the nurse who wished to take her to a chair and ran past the benches with mincing steps, saying "very many here". When requested she sat down on the chair, not in the quickest way but made gestures to the lecturer and the audience. Scarcely had she sat down when she jumped up again, walked a few steps, turned back and then sat down for a few minutes. However, her hands continued to move and expressive movements of the face went on in a lively way. These movements partly consisted of laughing but partly were made up of other exaggerated expressions. Thus, she showed movements expressing attentiveness or astonishment in relation to some event in the environment or coquettish behaviour, or feigned indignation or some other psychic content. Although this play of expression for the most part appeared to be completely unfounded, it took place in a natural way so that there was no suggestion of grimacing. The gestures and the play facial expression fitted neatly together. After a while, the patient began to play with her legs and threw them about, so that one of her shoes came off and fell in front of a student. She ran to pick up the shoe but she did not put it on straight away. Instead she swung it around in a circle so that everyone expected she was going to throw it at someone. She was unable to put the shoe on because other movements interrupted her attempts. Finally the nurse was obliged to help her with it. Then she began to skip about, turned round in a circle and with a pathetic gesture said "Shall I sing?". She was encouraged to do so and began to sing a popular song, but stopped almost immediately. She turned towards a student and shouted something to him but it was so poorly articulated that one could not understand what she had said. Then she turned away with almost a jumping movement, coquetted with her ward doctor whom she called by name and then sat down once more on the chair which happened to be in her way. Thus she was continually in movement, in the sense of expressive and reactive movements. She said very little but from time to time she made short remarks which had some reference to the environment, as perhaps "How they are all looking", "What is he writing then?" "The Matron is also here". When asked simple questions she sometimes gave short answers. On other occasions she did not listen at all and, instead of answering, made some remark which did not have any connection with the question. Speech was poorly articulated and the sounds were mostly uttered quickly so that many of her short phrases were unintelligible. She left the lecture theatre when asked to go, but again not in a straightforward way. She walked to and fro and made many gestures and expressive facial movements. These movements appeared to be her way of saying goodbye to the students.

At the end of March she became quieter and, by the beginning of April, she was completely cured. At this time, K. was quiet, well-balanced and sensible. I wanted to present her again at a lecture as a healthy young woman. However, she begged me not to do this since she was, understandably, very ashamed of her previous behaviour. Her affectivity was completely natural. After many successful periods of leave, K. was discharged on 27 April, 1960 in a completely normal psychological condition. She was not treated with shock therapy but was only given a phenothiazine preparation for a time in order to damp down the symptoms. She began work again eight days after her discharge and behaved quite well at her place of work.

This is an example of a motility psychosis with a typical hyperkinesia. The overactivity was made up of expressive and reactive movements. The illness acquired a manic colouring from the cheerfulness which was nearly always present. However, the occupational overactivity of mania is quite different from this hyperkinesia. The manic pressure of speech was also completely absent in this case and instead short phrases were produced and followed by long pauses. This is characteristic of motility psychosis. For some peculiar reason the diagnosis of hebephrenia is often made in these cases. This was the case in this patient before she came to our clinic. The expressive motor overactivity, especially when it is associated with cheerfulness, is felt by many observers to be "foolish" or "silly". I cannot understand this, since, in my opinion, there is no relation between the senseless smiling and giggling of the hebephrenic and the associated cheerfulness and expressive reactive overactivity of these patients. If the mood, as is often the case, is indifferent or has an anxious colouring, then

the overactivity can be derived from the mood with even less justification. In such cases, many observers diagnose catatonia.

Those authors who do not recognize the motility psychoses, usually diagnose the akinetic form of motility psychosis as catatonia. For this reason, I will now give an example of this form.

Irmgard D. was born in 1939. She did not do well at school and had to repeat one year at the ordinary school. Her father, an agricultural labourer, was also somewhat poorly endowed. He died from tuberculosis. There was no family history of nervous illness. In her work as a kitchen maid, D. was considered to be somewhat irritable. In March 1958 she became anxious and said that she felt she must die. She soon settled down and then appeared to be somewhat too cheerful. She looked for a boy friend, went out with him a good deal and often came home late. In September 1958 she became anxious again and talked about dying and could not sleep any more. She was, therefore, brought to our clinic.

She had ideas of reference, saying that people laughed at her and said nasty things about her. She was anxious and said that she must die. Her verbal expressions were very uniform and she spoke in a monontonous voice. She scarcely moved and sat in bed in a tense posture. Her facial expression was anxious but also rigid. The anxious facial expression gradually disappeared but the rigid expression remained. At that time she sat motionless and either she did not answer questions at all or she merely answered "yes" or "no". During January 1959 the inhibition gradually declined and D. became accessible and friendly. She took part in ward activities. On 18 February, 1959 she was discharged. At this time she was well and was able to do her work as well as she had done previously.

In December 1959 she again became quiet and withdrawn. She stopped eating and again began to talk about her morbid fears. She ran into the cellar and crept into a corner. On 24 December, 1959 she was readmitted to our clinic. At this time she hardly spoke at all but sometimes she shook her head almost imperceptibly. On one occasion she said "yes" very softly but apart from this she said nothing. At the same time she produced no movements but sat motionless with a rigid facial expression. She did not look after herself so that she had to be fed and taken to the toilet. She was treated with cardiazol shock therapy but she only improved for one day after each treatment and then relapsed. At the beginning of February, 1960 I presented this patient in the lecture theatre. She sat stiffly on the chair and did not look up when questioned. She did not look round but only stared straight ahead. When she was asked to walk she did so slowly and held her body stiffly. On insistent questioning I obtained a few completely monosyllabic replies. When questioned her facial expression did not change and she did not move.

During February the inhibition gradually declined. D. began to speak and her posture and expressive movements became more lively. Finally her psychomotor activity was completely free and normal and her attitude was friendly and sensible. She was discharged cured on 14 March, 1960. When seen fourteen days later she was quite normal. She was back at work.

The first phase in this patient was very mild. It would appear that her mood was at first depressed and later cheerful. As she was not seen at a clinic we do not know anything about her psychomotor activity at that time. The second phase of the illness was complicated by anxiety. The akinesia was to some degree interrupted by the anxiety. On the other hand the expression of anxiety was affected by the poverty of movement and took on a monotonous character. In the third phase the pure form of the akinesia of motility psychosis was present. Not only was there a general poverty of movement but in particular all reactive movements were absent and there was a general rigidity of expression. She did not relate to her environment at all and did not attend to her personal needs on her own initiative. The rigidity of posture and of expressive movements were just as striking when she was at rest as when she carried out scanty movements. Unfortunately, no photographs were taken of this patient, but Figures 5 and 6 are photographs of a similar akinetic patient. There was a mild depressive colouring to this illness, which led to the patient holding her head down. This is characteristic of depression but one can see from the total rigidity that the clinical picture is dominated by akinesia.

I have described hyperkinesia and akinesia in two different patients because I wanted to present recent cases and also because I wished to show photographs of one case which illustrates the nature of the hyperkinesia. In my book I have

FIG. 6.—Akinetic Motility Psychosis.

FIG. 5.—Akinetic Motility Psychosis.

quoted case histories of patients in whom the illness ran a longer course and in whom the hyperkinetic and akinetic states alternated. If a patient shows changes in both directions then these follow one another and do not occur at the same time. This is the most important point in the differentiation of this condition from the "periodic catatonia" of my classification. There is, on the whole, no similarity between motility psychosis and the "systematic" forms of catatonia so that I do not need to discuss the differential diagnosis of these conditions. On the other hand, it is often difficult to decide whether one should make a diagnosis of motility psychosis or periodic catatonia since hyperkinesia and akinesia also occur during the course of the latter illness. However, what usually distinguishes this illness at its onset is the fact that the opposite poles of the illness do not appear one after the other, but are partially present at the same time. Thus, in the presence of a general rigidity of the play of facial expression, the arm or face may show abnormal movements which are then often repeated in a stereotyped or iterative way. The facial movements are particularly characteristic in patients who grimace but are otherwise akinetic. Peculiar and very uncomfortable postures, which often occur in periodic catatonia, show that abnormal motor tendencies are present in addition to the poverty of movement. A negativistic reaction is also indicative of catatonia, but one should not confuse this with an irritated refusal since irritation, like anxiety, can occur in motility psychosis and interrupt the akinesia to some degree. When, on the other hand, a hyperkinesia dominates the catatonic clinical picture, then some akinetic features are also present. Thus the course of movements may be somewhat rigid so that the fluid supple character is absent. As a consequence facial expressive movements and gestures lose their expressive character and appear as distorted "parakinetic" movements. The next two Figures (7 and 8) show too patients in whom there are unnatural postures. This excludes the possibility of a motility psychosis.

The differential diagnosis of motility psychosis from the two other cycloid psychoses, confusion psychosis and anxiety-elation psychosis, is of limited importance since the prognosis is equally good in all three forms of cycloid psychosis. In fact, it is not uncommon to find overlapping clinical pictures since these forms of psychosis are so closely related to each other. It can be that it is at times impossible to make a differential diagnosis with any certainty. Thus the overactive movements of the motility psychosis may be associated with the incoherent pressure of speech of the confusion psychosis or they are associated with a profound anxiety or an ecstasy in the sense of anxiety-elation psychosis.

II. Confusion Psychosis

In confusion psychosis the disorder affects thinking, whilst in typical cases psychomotor activity and affectivity are not affected. Affective lability is marked in these patients so that there is no question of inadequate emotional expression. It is only when there are extreme variations in mood in the sense of anxiety or ecstasy that one is compelled to recognize the features of the closely related anxiety-elation psychosis. Thought disorder in the excited pole of the illness shows itself as incoherence but it does not resemble the incoherence of confused mania. In mild cases of confusion psychosis not only do the patients' utterances show no evidence of flight of ideas but they are soon characterized by being out of keeping with the current situation. These patients talk about matters connected with their homes, families, jobs or about something which they have experienced in the clinic. They produce their observations on these topics in an

FIG. 8.—Parakinetic Attitudes in Periodic Catatonia.

FIG. 7.—Parakinetic Attitudes in Periodic Catatonia.

orderly way but their remarks do not fit in with the current conditions, for example, they have nothing to do with the fact that the doctor is on a ward round and is asking them about their progress or perhaps about the last interview which they had with him. It is quite different in manic patients, who always take up an attitude towards the actual questions which they are asked. This difference also corresponds with the fact that at times the divertibility of the manic is absent in confused patients. A further indication of this difference is the fact that misidentifications of persons are very frequent in confusion psychoses since this indicates that the patient is not living in the correct situation. Pressure of speech, however, is just as much a feature of confusion psychosis as it is of mania. Inhibition of thought in the other pole of confusion psychoses leads to a poverty or even a complete absence of speech. Mutism is in fact the characteristic clinical picture in inhibited confusion psychosis. However, simple movements which require no previous thought are preserved, i.e., reactive movements in response to environmental stimuli or stimuli from bodily functions. This also applies to the play of facial expression which is not rigid and is only impoverished when thinking itself is impoverished. As these patients with inhibition of thought are no longer able to understand the environment they become perplexed, so that "perplexed stupor" (Kleist) represents the typical syndrome of inhibited confusion psychosis. The inhibition of thought also leads to false interpretation of the events in the environment. Ideas of reference and significance in association with a general stuporose pattern of behaviour are, therefore, in no way indicative of schizophrenia but on the contrary they are characteristic of the recoverable confusion psychoses. They even make the differentiation of this illness from stupor in manic depressive disease and motility psychosis more certain.

I will now describe a case of confusion psychosis in which the excited phases preponderated but several perplexed stuporose states associated with ideas of reference occurred at the beginning of the illness.

Liselotte E., a commercial clerk, was born in 1920. She had always been sociable, cheerful and well-balanced. She was also very musical. There was no known family history of nervous or mental illness. Her school record at the ordinary school and high school was good. She took up a commercial course and married at the age of twenty. During the war she was a bookkeeper, telephonist and interpreter.

In 1947 she suddenly became very quiet. She was perplexed, anxious, taciturn and was scarcely able to produce a coherent sentence. She was, however, able to express the idea that other people had changed in their attitude towards her and said, "It is all so comical". She expressed the fear that she would be cremated in the fireplace. On 16 June, 1947, she was admitted to Clinic B. At this time her thinking, speech and motor behaviour were all retarded. The case notes mention the searching and questioning element in her mimic expression. After admission she lay in bed apathetically, her mood was depressed and she wept occasionally, but would later smile in a perplexed uncertain way. Only when she was spoken to in an insistent manner would she reply in monosyllables, saying that there was something going on against her and that the nurses behaved strangely. Two weeks after admission she suddenly began to speak confusedly and produced an incoherent pressure of talk. She was quiet and perplexed again on the following day and her verbal expressions were inhibited. After two days the inhibition of speech became more marked and led to mutism. She began to speak again ten days later but always in a hesitating manner. "Everything is so comical, so many names, which are so well known to me, I do not see through it at all any more. They run about so much in black and make comical indications. . . . I must think about my relatives a lot. If I think of one someone sits straight up in bed; if I think of another, someone coughs; I do not see through it." The psychosis died away with electro-shock therapy. Three months after admission her thought and speech had become normal. She had acquired insight into her abnormal fear and ideas of reference. She was discharged on 15 September, 1947.

She was well for three years and three months when she became ill once more and was a patient in Clinics W., B., and L. She was admitted to W. on 25 January, 1951 and at first she was mute and refused her food. If spoken to she smiled timidly. The content of the few sentences which she produced somewhat later showed that she was once more misinterpreting events in her environment. One day two weeks later she was irritated and irascible but it was possible to make contact with her and she was talkative. After four weeks she once more

became inhibited, suspicious, taciturn and also anxious. On 26 March, 1951, she was transferred to Clinic B, where at first she was quiet and well-balanced, and only complained of "inner unrest". Soon after this her thinking became incoherent. Contact was good and she had an "incongruous very cheerful mood" with complete absence of insight. The excitement increased for one week. Incoherence of thought, marked pressure of speech, motor restlessness and occasional aggressive behaviour were noted. She was treated with electro-shock and insulin shock therapy. When discharged on 20 April, 1951 she was well behaved, had no thought disorder and her mood was well-balanced. However, four weeks later on 22 May, 1951 she was admitted to Clinic L. At this time she was stuporose, mute, refused food and scarcely left her bed. In the following seven and a half months the intensity of the inhibition was very variable. When she was somewhat less inhibited she talked about many ideas of reference and significance. During one period there was complete mutism associated with psychomotor restlessness. E. ran here and there, slammed the windows open and shut, opened and shut her bedstead, rummaged about in her bed clothes and tore her nightdress. She had electro-shock therapy at intervals throughout her illness. In January 1952 this phase of the illness finally ceased. Her thinking at this time was clear, well ordered and sensible, her disposition was natural and open but her mood was still somewhat elevated. She was discharged on 26 January, 1952.

She became ill again and was an inpatient in Clinic W. from 22 April, 1952, until 4 November, 1952. According to a brief report from this hospital, E. was completely incoherent, expressed paranoid delusions and ideas of reference and was well when discharged.

She was well until March, 1953, when she was readmitted to Clinic W. on 25 March, 1953. At that time she had an incoherent train of thought and spoke in a cheerful way. She also showed transitory misidentifications of persons, a euphoric mood and a mild mimic hyperkinesia. Six weeks after admission the excitement began to die away. Shortly after this speech and thoughts were normal, quiet and friendly and she was able to make a warm emotional contact. She was discharged on 30 May, 1953.

One year later she was again an inpatient in Clinic W. from 5 June, 1954, to 28 August, 1954, with incoherent pressure of speech, euphoric mood, and psychomotor restlessness. Seven weeks after admission she was more accessible and gave rational answers which were, however, somewhat circumstantial. There was another short-lived excitement, eight days after which she was completely cured.

In the next phase, E. was readmitted to W. on 3 January, 1955 and discharged on 26 January, 1955. She showed a pressure of speech with incoherence and increased expressive movements. Once again the psychosis disappeared completely and there was no sign of a defect. Nevertheless, it is worth noting that the diagnosis of schizophrenia was made just as in the previous phases.

On 20 December, 1955, E. became ill again and was readmitted to Clinic W. where she was lively, euphoric and spoke in several different dialects. In the next few days a motor restlessness appeared in addition to the incoherent pressure of speech. Eleven weeks after the commencement of this phase, E. rapidly became friendly, well balanced in mood, well ordered, critical and insightful. She occupied herself and made good contact with her environment. She then admitted that she had short-lived acoustic hallucinations during her illness. Since the illness was always considered to be schizophrenic, the case notes stressed the remarkably good remission. When E. was discharged on 17 May, 1956, she was psychiatrically normal.

The next phase, during which E. was once more an inpatient in W., resembled the previous phases but the excitement was more intense. The incoherence was very marked and the pressure of speech could not be inhibited. She spoke to herself in a loud voice, scolded in the usual way and showed hyperkinesia. She was treated with Sedaraupin* and four weeks later she became quiet but was also sorry for herself, querulous and tearful. After a recurrence of the excitement, which lasted ten days, E. said, "I have now completely overcome it, I am better." She was discharged psychiatrically fit.

On 17 October, 1957, she was admitted to the Clinic for Nervous Diseases of the Charité. Her train of thought was again incoherent and among other things E. said, "The man thought I had stolen his action. Do you know Mac Ellersten? They write everything well together, one hundred and fifty strokes a minute. Come little brother, I want to stroke you. You have already trodden on my corns on one occasion. I will come from Europe to Normandy. You must play on the lemon wings. Everything is in the egg flip. Yes, get out of this knocking shop." She was disinhibited, overfamiliar and erotic. At times she gave the doctor a false name. In a brief quiescent period she said, "One is now quieter, that was really a kaleidoscope." After three months this phase ceased.

The longest phase of the illness so far was from 24 May, 1958 to 13 August, 1959, during which period E. was in the Clinic for Nervous Diseases of the Charité and Clinic W. During this phase the patient said the following on one occasion: "What do you want here, do you want to visit me together with a man? We were in the Harz, but that is only an intermediate point and therefore very insignificant. He had such beautifully clean and well cared for hands, I like that in a man. He wanted to take his school leaving examination in Berlin. He was able to really speak his mind for once with me. I was also slain, everything which he had experienced in America. However, I would not like him to be hitched up once more with this

* A preparation of reserpine.

Else. We then travelled with this assembled car. Luckily you have your own father. It is a matter of the letter which I have written, has it been delivered to you in general? There is the matter of the service, I have done that, so that I should not break down here. That is everything which your father might have been obliged to listen to from me." During the next few weeks the excitement reached a severe degree and then it was replaced by a quieter state. Quiet and excited periods alternated in this way six times. Then the phase finally ceased and E. remained well.

E. became ill when twenty-seven years old and until now has passed through fourteen phases of an excited inhibited confusion psychosis, four inhibited and ten excited phases. One could, of course, count many of the sudden changes in her clinical state as additional phases. The inhibited phases were associated in a characteristic way with ideas of reference. In the excited phases there was often an admixture of hyperkinetic characteristics. The confusion was at times so marked that one could scarcely find a connection between two sentences. At other times it presented as a milder disorder which, as is seen in the quotations above, took the form of very long stories which were organized to some degree but which were in no way suited to the current situation. The last quotation from the year 1959 is a fragment of this sort, because the patient told the story of an encounter and a journey with a man in a way which was intelligible to some degree. However, it is not possible to understand what she was wanting to say when she made the statement. For this reason these observations can be considered as completely incoherent. In one phase in 1951 a type of mixed state occurred, a mutism with hyperkinesia. It could be said that the mutism represented the inhibited pole of the confusion psychosis and the hyperkinesia was a characteristic of the excited pole of the motility psychosis.

In the normal intervening periods E. carried out her professional activities. She worked as a commercial clerk and interpreter. Apart from this she worked in her garden and carried out her household duties very well. She was prudent and in her work she was punctual and precise. Even after her last discharge from hospital she acquired her previous pleasant disposition. Her mother was ill and she looked after her very carefully. The female doctor, who visited her mother at home, was impressed by the patient's natural pleasant manner.

In view of the course of this illness, I consider that this patient did not have schizophrenia. After such severe phases, which at times lasted a very long time, a definite defect would have appeared in a schizophrenic illness. One can see here how important the diagnosis of a cycloid psychosis is for the prognosis. All the phases were interpreted as schizophrenia by doctors who did not know the clinical picture of confusion psychosis. In the stuporose states the ideas of reference caused the diagnosis of schizophrenia to be made, while in the excitements the misidentification of persons and the severe confusion, which often went far beyond what is seen in mania, gave the same impression.

If one is obliged to think of the diagnosis of schizophrenia in a confused excitement, then the most likely diagnosis is schizophasia. This special form of illness occasionally does develop out of states which in the first place one would like to interpret as confusion psychoses. As a rule the thought disorder in schizophasia, however, very soon goes beyond incoherence, in that logical contaminations and frequently neologisms also occur. I do not need to reproduce an example of schizophasic speech. It would be very difficult to translate it into English, because one partly does not know what the patient really means.

III. Anxiety-Elation Psychosis

In anxiety-elation psychosis only the affectivity is involved unless there are atypical features. This affective change is not a change in the sense of a cheerfulness or sadness as in manic-depressive illness. It takes the form of affects which disturb the patient profoundly. One pole is anxiety and the other is ecstasy. The anxiety is associated with ideas of reference, the content of which indicates the affect. They are to be distinguished from the ideas of reference of inhibited confusion psychosis which have a background of perplexity. Of course, transitional clinical pictures are often found because of the close relationship between the cyloid psychoses. Inhibition of thought may be present in anxiety psychosis and anxiety can also occur in inhibited confused psychosis. In the elation psychosis not only are expansive ideas produced, but, almost always,

these patients want to make other people happy. They usually believe that they are able to bring salvation to mankind by religious or political means. Anxiety psychosis is more common than elation psychosis. I would like to describe a patient in whom both poles of the illness occurred to the same degree.

Wolfgang Sch. was born in 1932. He was a baker and confectioner by trade. There was no family history of mental illness. According to his mother he was always very anxious as a child and was easily upset. When the other children hit him he did not hit back. On his first day of school he was extremely anxious, so much so that he threw himself on the floor and screamed. Only after some days did he go to school. He also suffered very much from anxiety in later life. However, he could be contented, happy and well balanced. On the whole he was very energetic in spite of his mood change.

He was treated as an in-patient for the first time from 30 October, 1953, to 4 December, 1953. While on holiday, he became restless, anxious and later excited for no apparent reason. He was admitted to Clinic C. where he claimed he was a writer and that he had discovered the gift of hypnotism. He had also discovered the philosophers' stone. He made up many theories about Marxism and explained that he was stronger than Marx, Engels, Lenin and Stalin since they were frightened of dying and he was not. He wrote very much during his stay in the Clinic and made many political suggestions. He also wanted to help the other patients in the Clinic to get better and believed he had the ability to do this. He improved following cardiazol shock therapy but still showed some anxiety. On 4 December, 1953, he was discharged at his brother's request. The diagnosis at this time was schizophrenia.

After his discharge in 1953 his mood changed into one of anxiety which was associated with the feeling that he was being watched. This led him to the conclusion that he should renounce his intellectual work. He then became a forestry worker. After nine months, he felt well again and wanted to take up intellectual work. He took a position as a director of a home and shortly after this he married. He was full of his work and showed tremendous initiative. He created a beautiful and nicely arranged home out of an almost derelict house. He was subject to mood swings during this time. However, his mother thought that this was due to his wife's frequent illnesses and that the patient was always anxious about her. In September, 1958, his wife died from aortic stenosis and dissecting aneurysm. He was very upset, he stopped work and would only talk about his married life. After the funeral he wrote a letter to his brother in which he referred to his wife in unhappy terms. However, he also made remarks which were reminiscent of his earlier ideas. He again began to talk about the special task in relation to mankind which he had to fulfil. Later, at the beginning of October, he developed a depressive mood which was associated with anxiety and weeping. At this time he said that his wife was not dead. On one occasion it seemed to him that he saw her sitting in a train as it went past. When he was visiting his brother, who is a chemist, he saw an estimation of alcohol being made. He then refused his food and said, "The food will even turn into alcohol in my body." After this he often would not answer questions. He became restless again, even at night.

He was admitted to our clinic on 20 November, 1958, and discharged on 18 December, 1958. He appeared inhibited and expressed ideas of reference. Thus he said, "The patients call themselves by different names—probably because of me." He thought newspaper articles referred to him, and he was afraid that there was something going on around him. From time to time his anxiety increased markedly and he believed that he was going to be taken away and imprisoned.

A rapid improvement took place following cardiazol shock therapy. Only three weeks after his admission Sch. was already affectively normal and did not expressed any morbid fears. His emotional expression was free and he appeared to be somewhat happy in himself. When discharged he was quite active and wanted to go with a friend to a ski camp.

He was seen on 14 August, 1959 for review. He said that he had actually gone ski-ing immediately after his discharge. At that time he had felt very well and completely fit. After the holiday he began work again in his old job as a director of a hostel. In February, 1960, he was chosen for a course for state home teachers. In July of the previous year he had passed the examination with the report "very good". He had great plans for the future. He wanted to take his teacher's diploma the next year in order to specialize in Russian and to be able to use his educational knowledge to better advantage.

In his spare time he read a great deal and often went to the cinema or the theatre. Mood swings occurred from time to time in the same way as they had done before his illness. If at any time he became excited he would go to his room or go for a walk "in order to prevent an explosion", as he put it. His mood appeared to a large degree to be dependent on the weather.

At the follow-up interview, the patient came into the room in a friendly manner. Conversation began easily and it was possible to make good contact with him. The form and content of his thought was normal. His emotional expression and affectivity were consistent with the situation. He had complete insight into his illness and rejected his former ideas of reference as well as his grandiose ideas. He had become reconciled to his wife's death and had decided to re-marry some time in the future.

As this patient suffered from mood swings since childhood, one could say that he had a cyclothymic temperament. However, it is probable that the mood swings in this patient were

of a different kind than those in individuals who are manic-depressives. At those times when Sch. was anxious, withdrawn and lacking in confidence, it could be that he was suffering from an attentuated anxiety elation psychosis. I am of the opinion that the temperament, in patients with cycloid psychoses, can contain some indication of these illnesses and cannot be simply equated with the cyclothymic temperament of manic-depressive illness. Many of the abnormal mood states in this patient had a marked morbid character. In 1953 he was ecstatic and expansive following a short-lived anxiety state. He felt stronger than Marx, Lenin and Stalin (the latter was still alive at that time) and he wished to bring true happiness to mankind. This was followed by an anxiety state with ideas of reference which led to the patient giving up his previous job to become a forestry worker for a time. It is not clear how long this anxiety state lasted but in any case he was active again after nine months. He looked for and found a new post which this time was more intellectual. He was very successful in it. During his wife's illness his mood swings came back again and appeared to be more severe than before. After her death he had at first a depressive mood which could be considered to be reactive. This was followed by a short period in which he once more wanted to carry out a special task in relation to humanity. This was certainly a brief elation psychosis and was followed by the first very severe anxiety psychosis, which died away quickly like all the other phases. Since that time Sch. suffered from mood swings, as before, but apart from these he was completely well. This was confirmed by the follow-up interview.

If one does not recognize the anxiety-elation psychosis then such clinical pictures are sure to be diagnosed as schizophrenic. However, the course of the illness shows that the psychosis is curable. In the present case the mood swings to which the patient was subject suggest that there is a circular illness. In such clinical pictures one is, of course, not tempted to make the diagnosis of manic-depressive illness.

If the anxious and ecstatic states do not occur in pure form then one is compelled to consider the diagnosis of schizophrenia. Here again it is a question of a special form of schizophrenia, viz., affect-laden paraphrenia, as I call it. This illness leads to mood variations in the sense of anxiety and ecstasy but as a rule, even at the onset of the illness, the symptomatology goes beyond the characteristic clinical pictures of anxiety psychosis and elation psychosis. In affect-laden paraphrenia persecutory ideas occur, which cannot be understood as arising from the anxiety and which partly betray a hostile attitude towards the environment. In the ecstatic states of affect-laden paraphrenia grandiose ideas occur, which do not fit in with the affective background, or hallucinations may occur which are out of keeping with the total clinical picture. On the other hand hallucinations, especially visual hallucinations, which fit in with the affective state, do not affect the prognosis. Visions are by no means uncommon at the height of the ecstasy in elation psychoses. These patients may see God or have similar impressive experiences. On the whole it is usually not difficult to diagnose an anxiety-elation psychosis and to differentiate it from schizophrenia, i.e., affect-laden paraphrenia.

Summary

A group of acute recoverable psychoses is described, which, in the opinion of the author, are neither manic-depressive nor schizophrenic. These cycloid psychoses can be classified into three subgroups—motility psychosis, confusion psychosis and anxiety-elation psychosis. They are all bipolar illnesses in that two contrasting clinical states may occur at different times. In motility psychosis hyperkinesia and akinesia occur but there is no admixture of hyperkinetic and akinetic features as in periodic catatonia. The hyperkinetic movements are reactive and expressive and are carried out in the usual smooth manner. Confusion psychosis is characterized by incoherent thinking. In the excited phase there is pressure of talk and misidentification while in the inhibited phase there is retardation or even stupor associated with ideas of reference and significance. States of anxiety and of elation occur in anxiety elation psychosis. In the states

of anxiety ideas of reference occur while in the elated states expansive ideas occur and usually there is a desire to make others happy. The three subgroups are not sharply delimited from each other, so that overlapping clinical pictures occur.

These psychoses are associated with a good prognosis. Sometimes it is difficult to differentiate them from schizophrenia. In that case the schizophrenic illness belongs to the author's non-systematic group, i.e., periodic catatonia, schizophasia and affect laden paraphrenia, which has a better prognosis than the systematic group of schizophrenia.

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ENVIRONMENTAL AND HEREDITARY FACTORS IN THE SCHIZOPHRENIAS OF OLD AGE ("LATE PARAPHRENIA") AND THEIR BEARING ON THE GENERAL PROBLEM OF CAUSATION IN SCHIZOPHRENIA

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THE paraphrenias raise a number of problems common to many other disorders in the field of psychiatry, and their solution might therefore advance knowledge in a number of directions. The relationship between paraphrenic, paranoid and schizophrenic illness has long been disputed, and no view at present commands general acceptance. It has seemed to us that these controversies have often turned upon unacknowledged assumptions as to whether clinical, prognostic or genetic criteria, or all of these, were to be employed to decide the issue.

In a descriptive sense the term has been applied by continental and English authors to a condition, arising usually in the fourth or fifth decade of life, in which paranoid delusions and hallucinations are prominent, but the affective volitional and intellectual aspects of the personality remain fairly well preserved despite a chronic course. It is customarily distinguished from paranoid schizophrenia on the grounds that typically schizophrenic symptoms are absent. It is also considered distinct from paranoia, where the delusions are very well systematized and hallucinations do not occur. Yet when the later course of the illness is taken into account, many of these points of distinction fail, since, as was found by W. Mayer (1921), after a few years more than half of patients with paraphrenia do exhibit typical schizophrenic symptoms, and nearly all of a group of patients with paranoia were found by Kolle (1931) to have primary delusions, which are widely regarded as pathognomonic of schizophrenia. Kolle's studies also showed genetic affinities between paranoia and schizophrenia, since among the children typical cases of schizophrenia were six times, and among the sibs, three times as common, as in the average population, though less common than among the relatives of schizophrenics. The result has been that chronic delusional states with or without hallucinosis are now regarded by many authorities as mild forms of schizophrenia, attenuated and modified by certain constitutional features. In the American system of classification paranoia is however classified among the paranoid states, which are regarded as "reactions", schizophrenia, including the paranoid form, being specifically excluded.

The term "paranoid reactions" is widely used to cover a group of conditions, mostly of short duration but sometimes chronic, arising in circumstances of adversity, characterized by paranoid and referential ideas, often with hallucinations, but lacking the nuclear symptoms of schizophrenia. The personality is

often over-sensitive, prone to suspiciousness or otherwise abnormal. These reactions have been observed during imprisonment, among aliens and refugees, in the deaf or disfigured, during adolescence and the period of involution, in compensation cases, in folie à deux and in infections and intoxications. In some of these conditions family studies have also shown some increase over expectation in the risk for schizophrenia among relatives.

When paranoid delusions commence in old age, they are generally believed to be due to senile or arteriosclerotic changes in the brain. Yet, as the above account shows, the aetiology of paranoid psychoses is complex. In the paranoid reactions and the chronic delusional states genetic and other more general constitutional factors interact with exogenous ones to produce the mental illness and even in schizophrenia itself the studies on twins by Slater (1953) and on social factors by Hollingshead and Redlich (1953) and by Hare (1956) have focused attention on the contribution made by the environment.

In this study, "late paraphrenia" is used as a suitable descriptive term, without prejudice as to aetiology, for all cases with a paranoid symptom-complex in which signs of organic dementia or sustained confusion were absent, and in which the condition was judged from the content of the delusional and hallucinatory symptoms not to be due to a primary affective disorder. Provided these criteria were satisfied, no case showing a paranoid psychosis was excluded. In the result, cases were found to have more or less well-marked schizophrenic symptoms, and a small proportion exhibited no hallucinations. The material was studied as one group in order to see what related factors emerged as the most significant and consistent. Different varieties would be identified if this proved possible, and their aetiology studied.

Special importance was attached to follow-up of the cases to determine the rate of mortality and the incidence of cerebral disease.

In the course of these studies we became aware that many patients were solitary, eccentric, isolated and difficult individuals and that these characteristics had been very long-standing rather than imposed by an illness of recent onset. They therefore presented a particularly favourable opportunity for investigating the phenomenon that has been rather crudely called "social isolation". In addition to schizophrenia, where a failure of social communication was first suggested as a factor in causation by the researches of Faris and Dunham in Chicago (1937), the mental disorders of migrants, minority groups, the deaf and those who attempt and commit suicide have been frequently attributed in part to a social predicament of this nature. An aetiological role has been attributed to social isolation in these diverse settings largely on the strength of statistical associations elicited in the course of epidemiological research. The network of cause and effect is difficult if not impossible to disentangle in these enquiries. The essential complement to them is the detailed investigation of small groups of cases, for, until confirmation has been adduced from study of the life histories of actual patients with mental illness, the role of "social isolation" as a cause of psychiatric disorder must remain conjectural. This investigation has therefore sought to define consistencies in a group of intensively studied cases. To exclude as far as possible the likelihood that we were dealing in any consistencies defined with the effects of selective bias created by entry to hospital, or some other irrelevant contingency, the findings have been compared with those in cases with affective and organic psychosis aged 60 years or more admitted to hospital during the same periods.

The main questions we set out to investigate in the late paraphrenias were to what extent social isolation or difficulties in social communication were

peculiar to this group of old age mental disorders, what role they could have played in causation, what relationship they bore to genetic, psychological, social and organic factors, and finally, what part any of these factors could have played in the postponement of breakdown until old age, a result which would be highly desirable for schizophrenic disorders as a whole.

Material

This was obtained from two sources, but the diagnostic criteria were in each instance those described above.

(1) During the period 1951 to 1955 patients aged 60 and over admitted to Graylingwell Hospital, Chichester, were examined by one or both of the authors and allocated to various diagnostic groups (Roth, 1955). During this time 42 patients consisting of 39 women and 3 men were diagnosed as "late paraphrenia". All but 6 of these patients have been followed up for at least five years and it has also been possible to obtain detailed social and family histories for the large majority, and in the remainder, information about the circumstances in which the illness developed.

(2) The records of all patients aged 60 and over admitted to the Psychiatric Hospital, Stockholm, during the period 1931 to 1940 were examined by one of us * and as a result 57 patients of whom 48 were women and 9 men, were diagnosed as suffering from paraphrenia with onset late in life. As part of a clinical and genetic study these cases were all followed up until death or until June 1956, and in addition a family investigation was made into the incidence of psychosis amongst the relatives. Information was obtained from members of the families and from the Parish Registers, which are exceptionally complete in Sweden. Since the Psychiatric Hospital was a teaching hospital the case records were unusually complete in regard to such items as previous illness, personality, and social and domestic circumstances about which information is sometimes lacking in mental hospital records.

In both hospitals cases with paraphrenia formed about 10 per cent of all admissions aged 60 years or more. The age and sex distributions are shown in Table I. The mean age was about 70 years and women predominated, in excess of the population figures. Only 7 cases had been previously admitted to a mental hospital but in every case except one this took place after the age of 60. The duration of illness varied from a few weeks to 20 years, but in the majority symptoms had been present for less than two years and in no case was the onset before the age of 55.

Table I

Age and sex distribution of paraphrenic cases

	Graylingwell (1951–1955)			Stockholm (1931–1937)			Total
	M	F	BS	M	F	BS	BS
Age Bracket							
60–64	1	9†	10†	1	20	21	31†
65–74	0	17	17	6	20	26	43
75–	2	13	15	2	8	10	25
All ages ..	3	39	42	9	48	57	99

† One female aged 59.

* D.W.K.K., during tenure of Fellowship from the Mental Health Research Fund London.

Clinical Picture

1. *The background of the illness*

(i) The *social setting* of the illness appears, as will emerge from the data to be presented, to be bound up in a number of ways with the fact that the large majority were women, of whom over half were unmarried. The sex distribution is strikingly different both from the population figures standardized for age (according to which in the Stockholm cases 21 males and 36 females instead of only 9 males and 48 females might have been expected), and from that found in schizophrenia when it occurs early in life, where the heavier incidence is among males. The predominance of the unmarried in both sexes is also greatly in excess of expectation. In Stockholm there were 36 unmarried patients, compared with the 11 that might have been admitted according to the population figures, and only 8 married patients instead of 26 expected, while at Graylingwell, although the predominance of unmarried patients was not so marked, 17 of 39 women were single and only 11 married.

A third point is that in both series over 40 per cent. of the patients were living alone, some in private houses or flats, others in rooms in lodgings or hotels. Patients with paraphrenia were far more often living alone at the time they fell ill than those with affective disorder (12 per cent.) or those with organic psychoses (16 per cent.).

It is of course possible to be living alone yet to be in close touch with relatives, friends or neighbours. But careful enquiry showed that all except 2 or possibly 3 of the Graylingwell paraphrenics who were living alone were indeed "isolated" in a social if not in an actual sense, whereas only 5 of the 26 patients with affective disorder who were living alone were isolated. It is true that in 5 of the latter the information was insufficient to allow a definite conclusion to be drawn, but over half were certainly in close or regular touch with other people and some were in daily employment, ran boarding-houses or frequently visited relatives. Among the paraphrenics only one was working and one other was in regular contact with a sibling.

As regards the 11 married women, one had lived alone in isolation since her husband's admission to a mental hospital many years previously, and another lived with an ageing taciturn man in an isolated rural cottage. In two cases the husbands shared some of the patients' delusions, so that in four instances at least the husband was a remote, ineffectual or submissive partner. Another patient had remarried shortly before her psychotic breakdown. Four of these five patients were childless, and the children of the fifth were living in a different part of the country.

In Stockholm there were insufficient data to make a comparison of the frequency of social isolation in the different groups. But if admission to hospital through the agency of the police or other authority is evidence of lack of contact with relatives, then, as Table II shows, this was much commoner among un-

Table II

Mode of admission to hospital among married and widowed patients in Stockholm

	Affective	Organic	Paraphrenic	All Groups
Police, etc. ..	2	11	18	31
Other methods *	49	39	31	119
Total	51	50	49	150

$\chi^2=16{\cdot}53$ df=2 P=<0·01

* i.e., admitted at own request or through petition by relatives or by transfer from a general hospital.

married and widowed paraphrenics than among the affective and organic groups.

Whether in their social isolation the patients were the victims of accidental circumstances or of their own life-long peculiarities of personality will be discussed at a later stage.

Although a few of the patients with paraphrenia were relatively well off, and all social classes were represented among them, some account must also be taken of the fact that (whereas nearly all had at one time been in regular employment) many were living currently on small State pensions or National Assistance in straitened or insecure circumstances. Although the social consequences of ageing are no doubt the lot of many in the aged population, we believe that these, as also the general decline in health and vigour associated with senescence, fell with special severity on this group of paraphrenics, consisting as it did predominantly of women, of the unmarried, and of those without close family or personal attachments.

(ii) *Physical health.* General health did not seem to differ from the norm for a population of similar age. Exceptionally good vigorous health was noted in several cases, and serious physical disease was uncommon, a fact which is clearly in accord with the practically normal lifespan of the Stockholm cases.

Special attention was given to the occurrence of sensory impairment and central nervous system disease of focal type. *Visual defect*, found in some 15 per cent. of cases (in about half of these of severe degree) was not more frequent than in control groups of comparable age, and seems only occasionally to have played a part in promoting persecutory ideas, as in the case of a totally blind woman aged 84, who lived in a Home, where from time to time she had attacks of noisy and abusive behaviour when she accused the staff of stealing her possessions.

At Graylingwell some *impairment of hearing* was found in as many as 40 per cent., of marked degree in about 15 per cent. In Stockholm, where probably only the more severe cases were recorded, the incidence was 16 per cent., while among patients with affective disorder, who were on average three years younger, the frequency was only 7 per cent. An even larger difference was found at Graylingwell, where 74 out of 91 affective and organic cases were considered to have normal hearing, and sight that was good for their age, whereas only 20 out of 41 paraphrenics were neither blind nor deaf in some degree. Although the assessments were made by rough methods only, and some milder cases may have been overlooked among the affective and organic cases, the differences are large enough for attention to be directed to them.

The presence of visual or hearing defect did not as a rule, greatly modify the symptomatology. Visual hallucinations were very prominent in some blind patients, and hallucinations consisting of *loud* sounds, singing and music, were common in the deaf. In several cases, hallucinosis was confined to the deaf ear, and sometimes head noises (tinnitus) seemed to provide a physical basis for the hallucinations.

As regards *focal cerebral disease*, this was seldom found, owing no doubt to our criteria by which organic psychiatric syndromes were excluded. Some evidence of cerebral disease or injury was indeed obtained on admission in eight cases (8 per cent.) but in very few of these, as will be described later, did it seem to have any bearing on the later course of the illness. The time of origin of the organic condition was usually very far removed from that of the paraphrenic psychosis. Five patients showed pyramidal signs—one a congenital weakness and deformity of a hand (she had also suffered from petit mal attacks), one

a hemiplegia dating from a head injury in childhood, and a third a hemiparesis, with an expressive dysphasia, thought to have followed fracture of the skull eight years previously. Another patient had a facial paresis attributed to "a small haemorrhage", with transient lameness, occurring 28 years previously, and the fifth stated he had had "several small (cerebral) haemorrhages" over the previous ten years (of which, however, no neurological evidence was found). In addition, two patients had coarse tremors of senile type, and finally there was a patient who had developed epileptiform fits soon after the onset of the psychosis. Three of these patients, all over 70, exhibited impairment of memory and orientation, but of fluctuating kind and not severe enough to warrant exclusion from the series. Moreover, the paraphrenic symptoms were usually quite typical. We conclude that paraphrenia occasionally arises in the presence of focal brain damage, which, however, acts not as a true precipitating factor but (if its presence is not entirely fortuitous) by increasing susceptibility to the psychosis among predisposed individuals.

2. *Precipitating events*

Hitherto we have considered some general characteristics of the group, and have concluded that female sex, the unmarried state, "isolation" and deafness are probably significant factors, and that for these reasons economic and social insecurity and the normal age-specific changes such as failure of eyesight and general health, though neither more severe or frequent than expected, are likely to cause greater handicaps than in the general population of similar age. But nearly one-quarter of the cases were neither unmarried, childless, living alone nor deaf. We therefore thought it might be profitable to estimate the frequency of traumatic events that could be dated accurately and were related in time to the onset of illness such as bereavements, acute illnesses, quarrels and domestic upheavals. We find that traumatic events of this kind which may have played a part in setting the psychosis in action are relatively infrequent. In Stockholm, where a comparison was made between the affective and paraphrenic groups, no precipitation at all could be found in three-quarters of the paraphrenic patients, whereas only 39 per cent. of affectives were apparently entirely endogenous. The fact that in 25 per cent. of paraphrenics some event was uncovered does not of course mean that in every case it was in actuality causally connected with the psychosis; the figure is a maximal estimate and some traumas apparently associated with the onset of illness may have been fortuitous.

Among the 42 Graylingwell cases, acute physical illnesses or operations were rare. Rather more common were disturbances affecting the balance and regularity of domestic life; three patients fell ill in the months following the marriage of a son or daughter, one after a second marriage at the age of 64. Bereavement *per se* did not seem to be important since only once did the psychosis follow the death of a husband, in the form of paranoid accusations about the will. In Stockholm, also, after the loss of a spouse, it appeared to be the upheaval of domestic life, particularly the necessity to move to new surroundings, that was connected with the beginning of the psychosis. In a few cases, however, the loss of a favourite child through death ushered in a period of mourning after which the paranoid illness developed. Of all types of event, only bereavement was relatively more common (33 per cent.) among cases where none of the factors discussed earlier, such as isolation, existed. Thus, while family ties were relatively few, where they did exist, their disruption may have been an important factor leading to the illness.

3. *Duration of illness before admission, mode of onset and development*

In affective disorder the duration is usually a matter of months, whereas senile psychosis comes on insidiously over two or more years. Among paraphrenics the duration falls on average in between these two extremes, but with very wide variations of a few weeks to many years. In about 15 per cent. the time of onset could not be decided, owing as a rule not to lack of information but to the gradual evolution of a personality disorder that could not be distinguished sharply from illness. Another feature of such cases was the absence of hallucinations, so that they form a relatively distinct subgroup, which is described separately below.

In the remainder the descriptions obtained of the duration and development of the illness seem to depend more on the extent of the witnesses' knowledge of the patient than on important differences in symptomatology. Unavoidable contact with other people, such as exists for married patients and for those living with their families, powerful emotional ("affect-laden") responses, such as anger or panic, and the early occurrence of hallucinations all tend to bring about early admission to hospital.

When there are no witnesses living in the house or in close touch, the first signs that something is wrong are likely to be interpreted as a change in personality taking place over a period of months, or sometimes longer, and manifested in increasing quarrelsomeness or in unprovoked abuse of those living near. Oddities in speech, appearance or in other aspects of behaviour are noticed. The patient may seclude herself, refuse callers, break off contact with tradesmen and at night may be seen wandering outside, or heard moving about the house, talking, laughing or crying out. Admission finally takes place when obvious self-neglect, assaultive behaviour, a suicidal attempt, or repeated baseless complaints to the authorities force some action.

Among patients who are socially more integrated, and about whose illness more details are known, florid hallucinatory states are generally found to have occurred early and were often the first indubitable psychotic symptoms, after the appearance of which admission to hospital took place within a few months and in some cases within weeks or even days. In less than one-fifth of all cases hallucinations are altogether absent and the illness then usually develops gradually over a period of one or more years. When hallucinations occur the pre-hallucinatory phase varies considerably in duration. There may be a period of weeks or months during which the patient is irritable, suspicious and dejected with poor sleep, culminating in the development of ideas of reference immediately before the outbreak of hallucinations. Occasionally this phase may last with fluctuations for several years during which there are ill-defined complaints of tiredness, weakness, loss of weight and sleep and the doctor may be visited frequently because of nervousness, indigestion or vague pains. Character traits of bad temper, hypochondria or suspiciousness are likely to come to the fore.

4. *Clinical picture*

To what extent do patients with "late paraphrenia" show the disorders of thought, affect and volition characteristic of schizophrenia? How are the symptoms modified by age? Can paranoid reactions be identified? Or are the cases mainly composed of paranoid depressions and organic states, as Fish (1960) maintains in his study of senile paranoid psychoses?

Primary affective disorders, many of them with prominent paranoid symptoms, have been carefully excluded from this material. A few cases that

seem to correspond to the "suspicious (*argwöhnische*) depressives" of Leonhard (1957) have however been included, since follow-up has shown that the paranoid-hallucinatory symptoms tend increasingly to dominate the picture with the passage of time. Moreover, the depression, which is always attributed by the patients to the incessant, unjust persecution, does not seem to be the primary disorder, and is at times overshadowed by anger or fear. Eventually the mood becomes shallow or even euphoric. We believe therefore that these cases fall within the paranoid rather than the affective group of illnesses.

Organic states with a history of increasing suspiciousness and forgetfulness, and later with ideas of being robbed, are of course quite common. But all cases showing unequivocal mental symptoms of organic deterioration on admission have been excluded by our criteria, and follow-up has shown that our paraphrenics have survived on average about five times as long as organic groups with dementia, their life expectation being in fact almost normal. Since neither somatic disease nor physical signs of cerebral disease are particularly common, considering the age, the role of organic deterioration in late paraphrenia appears to be confined, in the large majority of cases, to the mental and physical effects of normal age-specific processes.

Many typically schizophrenic symptoms occur, including *primary delusions*, which are often closely linked to hallucinatory experiences. For example, a patient suddenly accuses a man who has never shown the slightest interest in her of interfering with her at night, or of actually entering her bed; or a certain person whose voice is heard uttering threats, is believed to be intent on committing murder. The delusions may be more or less systematized and fantastic. They are usually persecutory, but also erotic, hypochondriacal or grandiose, in order of frequency, with varied combinations, but tend to be relatively restricted, e.g., to those in daily contact, to the house, room, bed or person of the patient.

In 28 per cent. of the Stockholm cases and in a similar proportion at Graylingwell *feelings of mental or physical influence* were found. Patients feel drugged, hypnotized, have their thoughts read, their minds and bodies "worked upon" by rays, machines or electricity, complain that they are spied upon, can get no privacy in thought or act. Catatonic stupor is rare but unpredictable behaviour may occur in connection with auditory hallucinations.

Hallucinations in clear consciousness are frequent and obtrusive. Auditory hallucinations occur in three-quarters of the cases. They consist of threatening, accusing, commanding or cajoling voices, jeering commentaries, screams, shouts for help, obscene words and songs, music, loud bangs, rappings, shots or explosions. "Messages" are received from a distance and acted upon. The thoughts are repeated aloud. God, spirits, distant or deceased relatives, or most often, jealous, hostile neighbours are held responsible.

Hallucinosis is often more disturbing at night, particularly in aged patients, and accounts of men, boys or animals seen or felt to enter the bedroom through the walls are characteristic. In other cases intruders are spied on the roof, faces appear on the ceiling, or famous personages pass by outside. Bad smells, fumes, the stench of rotting corpses, poisoned food, electric feelings or vibrations in the perineum or abdomen, are all commonly met with. Patients say the body is being cut or stabbed, the "backbone split in two". These experiences form, as a rule, a very conspicuous part of the paranoid beliefs and in some cases they wax and wane in a conspicuous manner, behaviour being correspondingly very disturbed or almost normal.

Incoherence of talk, even neologisms, occur but are unusual except in cases of long duration. The patients are generally lucid, but verbosity, circumstan-

tiality or irrelevance are found in some 30 per cent. of cases, and might be put down to senile deterioration, but for their persistence unchanged over many years.

Considering that all these phenomena occur in clear consciousness they have a veritable schizophrenic quality. When they are accentuated at night, an element of diminished awareness may be postulated, but even so, they are remembered, elaborated and acted upon later with total lack of insight. *Memory* is generally surprisingly well preserved. Disorientation, if present, rarely amounts to more than uncertainties about the date of the month or the name of the hospital, and absurd ideas about great age and misidentifications of people (when not due to visual defects) are unusual or parts of the patient's delusional system. In 9 cases, however, 7 of whom were over 70, disturbances of both memory and orientation, while not severe, were more prominent than in the remainder. The outcome in these cases is described later.

Finally, while *affective changes* of the gross kind seen in hebephrenic deterioration and catatonic withdrawal do not occur, some emotional blunting, mild incongruity or euphoria is quite common in cases that have lasted any length of time. In the earlier cases the emotional responses are congruous and consist of fear, anger or depression, occasionally excitement. Compared with manic-depressive psychosis, the mood even when depression is prominent is much more variable, often with rapid changes, and schizophrenic features soon become evident, while retardation and self-accusations are rare. Clearly the affective changes are much more akin to those of schizophrenia than of affective disorder.

Late Course of the Illness

Prognosis is poor. In the Graylingwell cases only one lasting recovery is known and only 4 of the 24 cases ascertained to be alive after five years were out of hospital. Of 6 patients who were discharged and are so far untraced, only one was considered to be well at the time of last contact which varied from a few months to three years after admission. Of the 14 deaths only 2 took place after discharge and neither of these patients had recovered mentally. A similar state of affairs was found in Stockholm. Although more patients were discharged under supervision, about half the remaining life-span was spent in mental hospitals or similar institutions, so that 57 individuals spent a combined total of nearly 600 years in hospital.

Temporary remission occurred either spontaneously, with E.C.T., or with tranquillizing drugs (which appeared to be of value in disturbed cases) in about a quarter of cases treated at Graylingwell and sometimes lasted for several months. But in half of all cases hospitalization was uninterrupted for at least five years or until death. Twelve cases out of the 43 received full courses of E.C.T. and of these 7 improved and were discharged; the remainder were not. Five cases were readmitted within a year and again discharged after E.C.T. and 3 out of 4 patients were sent home after a third admission. Follow-up letters have shown, however, that only one patient has remained well, after moving from an isolated rural cottage to her daughter's home in another part of the country. The small number of patients considered suitable for E.C.T. and the poor response to it is further evidence that a primary affective disorder was not in question.

The *clinical changes* that occur with the passage of time are the same as those seen in schizophrenia, and also reported after follow-up in a high proportion of cases of paraphrenia not commencing in senescence (Mayer, 1921).

Affective blunting or incongruity appear or become more conspicuous, and some patients, especially the deaf, become mute or incoherent and inaccessible. In about one-quarter of cases marked fluctuations in behaviour continue for years, coinciding with episodes of hallucinatory activity and quiescence, and during their more disturbed spells, patients are abusive and hostile, or preoccupied, withdrawn and negativistic. This picture is indistinguishable from that seen in chronic schizophrenics. Nevertheless, pronounced deterioration of intellect, personality and habits is not usual and many patients remain clean, tidy and generally well-conducted. Sometimes, after years the illness apparently becomes "burnt out", leaving residual defects, in a way entirely comparable to schizophrenia, since insight is not gained, and the previous beliefs, though no longer expressed, are regarded by the patient as real experiences.

As age advances, memory tends to fail in a proportion of cases, especially for such matters as length of time spent in hospital, and episodes of disorientation may occur for which a physical cause may or may not be found. In the latter case, they are usually associated with an exacerbation of other symptoms. About 21 per cent. of cases eventually develop features suggestive of senile dementia or focal signs of cerebral disease. (*a*) *Focal cerebral disease.* First we shall describe the outcome in those 8 cases in whom, it will be recalled, evidence of cerebral damage was already present on admission. Four cases from Stockholm were found to have survived for periods ranging from six months to 19 years. None of these developed further neurological signs, nor did organic psychiatric symptoms supervene. Only in one case was death attributed to "cerebral thrombosis" (and cancer of the pancreas) but no fresh neurological signs were described.* The patient with epilepsy died within six months (from a macrocytic anaemia) but the psychosis had lasted for as long as 8 years. Of the 4 Graylingwell cases, 2 have died, one, with the congenital monoplegia, from a coronary occlusion soon after admission, the other the patient with dysphasia, after 4 years with signs of an acute cerebral accident. This patient had developed an unequivocal organic psychiatric picture, the only one of these cases to do so. Two patients are still living, neurologically unchanged, the one with hemiplegia since childhood showing markedly deteriorated memory after five years (at the age of 91 however), the other, with a senile tremor, considerably improved mentally and fit to be discharged to a geriatric unit after eight years. We conclude from the follow-up that there is little evidence of cerebral disease of a progressive kind in these cases, except in the one instance, and that the presence of the organic condition was either wholly fortuitous or else as previously suggested merely served to increase vulnerability to the mental illness in some unexplained way.

There remain 8 additional cases in whom signs of cerebrovascular disease, or seizures possibly due to this, arose later in the illness, sometimes very shortly before death. Organic psychiatric symptoms appeared in 6, usually after the appearance of focal signs. Of 4 Graylingwell patients 2 are still living, one without showing organic mental symptoms. The remaining 6 patients survived for a mean duration of 5 years after admission (1–16 years) but after the advent of organic disease seldom for more than 2 years. Previous to this, the duration of the psychosis was over 4 years in 4 cases (in 2 cases, over 10 years). From these observations, we conclude that cerebrovascular disease sufficiently advanced to affect brain function is unlikely to have existed at the

* Owing to the certified cause of death, this case is added to the 8 described below when the final estimate is made of the number of cases developing signs of cerebrovascular disease after admission.

time of onset of the paraphrenic illness in more than at the most 5 cases, a figure that includes the patient with dysphasia, referred to in the previous paragraph, whose psychosis had existed for several years prior to admission.

Thus, while the total incidence of cases with focal cerebral disease amounts to 16 per cent. (including those cases with evidence for this on admission to hospital), the proportion in which the organic disease may be thought with some probability to have brought on the psychosis is much smaller, i.e., about 5 per cent.

(*b*). Turning now to consider how often symptoms of *senile dementia* appeared later in the illness, it has been necessary to rely almost entirely on the descriptive evidence available in the hospital and institutional records. Only one patient was seen personally at follow-up. The diagnosis may be difficult. Objective signs are absent in this condition and psychological tests were not carried out, and autopsy reports are not of much assistance. A pathological degree of mental change may have to be distinguished from ordinary age-specific changes, which may be difficult with patients in their eighth or ninth decade, also from subterminal confusional states, and in addition allowance has to be made for the effects of deafness and blindness, and for those symptoms of the psychosis itself, such as hallucinosis or blunting of affect, that may contribute to a state of "secondary dementia" mimicking true organic dementia. In Stockholm, 7 cases were found eventually to have developed mental symptoms difficult to distinguish from those of organic senile dementia, (i.e., 12 per cent.). There were 3 further cases about whom there was much more doubt. But the time lapse between the development of organic psychiatric symptoms and admission to hospital was long. In no case did the organic symptoms appear within the first five years, in 2 cases between 5–10 years, and in the remainder only after 10 years. In Stockholm cases developing senile change (7) or focal cerebral sign (5) after admission amount to 21 per cent. At Graylingwell, where the follow-up has been of shorter duration indications of dementia in the absence of focal cerebral signs or seizures have appeared only in one patient, now aged 75, after a very long illness.

Finally we shall consider the outcome in those 9 cases with equivocal organic psychiatric symptoms on admission. Did follow-up show that they were in fact suffering from gross progressive cerebral disease? With 2 or possibly 3 exceptions (included above), the answer is probably no. Despite their high age, 6 patients survived for more than 5 years. The quasi-organic picture can be accounted for in terms of a severe psychotic disturbance coloured by age-specific changes within the range of normal variation.

Systematic examination of the *certified causes of death* of all Stockholm cases showed that only 10 per cent were due to "cerebral haemorrhage" (and allied causes), a figure that corresponded exactly with the frequency of deaths from this cause in the general population of Stockholm aged 70 years and over. In other respects too, the causes of death corresponded with those found among the aged population.

Survival and Mortality

Independently of the clinical picture, evidence that these cases as a group are distinct from the organic psychoses is provided by the long period of survival and the relatively low mortality. In the Stockholm cases the length of survival was almost normal compared with a life expectation of only one-quarter of the normal in a consecutive series of senile and arteriosclerotic patients followed up

during the same period. Two-thirds of the paraphrenics were still living after five years and about one-half after ten years, while four-fifths of the organic cases were dead after five years.

At Graylingwell the rate of mortality was very similar and was far less than that found by Roth (1955) among two organic groups investigated by him at that hospital. In Table III the mortality among the paraphrenic and organic groups at the two hospitals is compared.

TABLE III

Rate of mortality among paraphrenic and organic cases

	Paraphrenia		Organic Psychosis	
No. of cases	G.H. 42	STM 57	G.H. 98	STM 81
Follow up:	% dead			
2 years	14	11	80	63
5 years	32	35	—	81
10 years	—	51	—	96

CLINICAL VARIETIES

Clinical varieties may be distinguished on the grounds of differences in symptomatology or in aetiology. Thus the cases might be grouped according to the presence or absence of marked affective colouring (c.f. the "affect-laden paraphrenia" of Leonhard), or of hallucinations or according to the quality of the delusions. Such methods of classification would seem, however to have only descriptive value.

The following three groups are tentatively put forward on grounds of possible differences in aetiology. But since aetiology in paraphrenia is certainly complex, these differences may well be of degree and not of kind and it is doubtful if any sharp boundaries exist between the groups.

Group 1. Abnormal personalities with paranoid psychoses; no hallucinosis

When all cases without hallucinosis (20 per cent.) were provisionally separated from the rest it was found that they had certain other features in common: (*i*) long-standing abnormalities of personality, of a kind that interfered with human relationships; (*ii*) age on admission usually high, often over 75 years; (*iii*) the physical stigmata, including sensory defects, associated with ageing; (*iv*) delusions almost confined to ideas of theft, ill-treatment or poisoning by those in everyday contact with the patient.

The onset of the psychosis in these patients is hard to date, and relatives tend to regard it as a caricature of the usual personality. We may here be seeing long-standing paranoid or other abnormal modes of reaction becoming accentuated in response to the mental, physical and social changes that accompany ageing.

Group 2. Paraphrenias arising under unusual circumstances or after prolonged isolation

In about 25 per cent. of cases the delusional ideas were "intelligible", but only to a partial extent, in the light of the actual circumstances of the patient. For example, a single and solitary woman who suffered from an epithelioma of

the lip following burns due to X-ray treatment for hirsuties and a unilateral facial paralysis, had for long been very sensitive about her appearance. For about four years she had had ideas of reference, and more recently had begun to believe she was being tormented by the other guests in her lodgings; they had "got hold of her mind in some way". After operation on her lip she left hospital but was still seclusive and reticent.

A married woman who became herself psychotic after sharing a house for some years with two psychotic tenants and a husband who also suffered from an induced psychosis, though of a milder form, was symptom-free in hospital but relapsed on three occasions after returning to the same environment. In a third case a housekeeper living alone with an elderly man developed a persecuted hallucinated state that had obvious links with the social and sexual conflicts she felt about her situation, while the remaining patients in this group were mostly single women, living isolated lives, whose paranoid ideas concerned eviction and burglary and mirrored understandable anxieties. In a few cases serious physical disease or blindness modified or dominated the clinical picture.

For most of these patients no future could be envisaged outside an institution and though a few did in fact gradually improve, only one patient for whom satisfactory arrangements could be made eventually made a lasting recovery. In the remaining cases the illness pursued a progressive and chronic course unaffected by environmental circumstances. Moreover schizophrenic symptoms such as ideas of influence and affective incongruity were not lacking and schizoid traits in the premorbid personality were relatively common. Situational factors are therefore not adequate causes of the illness nor do they suffice to explain its chronicity. We are clearly not dealing with "paranoid reactions" in the sense of potentially reversible responses to adversity. And the distinction from the mainly endogenous paraphrenias described in the next section is a relative one.

Group 3. Mainly endogenous paraphrenias

The bulk of the cases, at least 55 per cent., fall into this group. External stresses are absent, or if present seem to have little bearing on the delusions, which are systematized and fantastic in varying degrees. Further subdivision is unwarranted in the present state of knowledge, but the group contains five women showing very marked schizophrenic features after psychoses of long duration. There are also 5 or 6 patients (15 per cent.) with a markedly depressed mood, but as already mentioned the scope of the paranoid symptoms and the later development of bizarre or erotic delusions and persistent auditory hallucinations confirmed that the illness was a paranoid one.

Inherited predisposition is probably relatively important in this group, since three of the patients had psychotic sibs. But deafness, which occurred in nearly 50 per cent., ageing and social isolation may provide the specific stresses that cause the illness to become manifest.

The subdivision into these three groups is tentative and it has been suggested mainly with a view to facilitating further enquiry into aetiological factors. The common features linking the three groups are the frequency in all of the premorbid abnormalities of personality to be described below, the commonness of social isolation due to social, psychological, physical or accidental factors and the chronic and inveterate nature of the illness. The distinction is most clear between the first and the remaining two groups in that in the former the illness appears to grow insensibly from the premorbid abnormalities of personality without the sharp, step-like change that had so often occurred at some stage in cases belonging to Groups 2 and 3. This distinction is underlined by the absence

in all cases of Group 1 of hallucinations as well as other features generally regarded as characteristic of schizophrenia. The course of events in Group 1 therefore exhibits many features of an abnormality of "development" as distinct from the disease "process" (in Jaspers' sense of these terms) manifest in Groups 2 and 3. However after the illness has been in progress for a number of years, these distinctions become somewhat blurred and it may well be that the differences between all three groups are of a quantitative rather than a qualitative kind.

Predisposition and Environment

The question of predisposition is of major importance. Of the aetiological factors so far identified—lack of close ties, situational stress, deafness—none are specific; they occur in many people most of whom never fall ill. Evidently only a proportion of people are vulnerable. This vulnerability may be due either to the presence of a major gene causing mental illness (manifestation of which is delayed until late in life) or to deviating personality characteristics such as eccentricity which may be due to a major gene, but more probably arise from complex factors, both inherited and environmental, of a kind that interact to produce different types of temperament and body build. The evidence for monohybrid inheritance is discussed later. In eccentric individuals, sufficiently adverse circumstances may precipitate an overt mental disorder which presents in caricature the features of the premorbid personality. We have observed this sequence of events in Group 1 of the clinical varieties referred to above.

(i) *Personality and body build*

As regards body build it is of interest that pyknic habitus was uncommon (as opposed to its frequent occurrence among the affective groups). Cycloid character traits also were conspicuously absent, and there is therefore no support for the idea that the presence of a "manic-depressive diathesis" is one of the factors that tend to postpone the onset of paranoid illness until late life, as has been suggested for "paranoia" by Kolle (1931).

In both series of cases the personality traits found were predominantly of paranoid and schizoid type (jealousy, suspiciousness, arrogance, egocentricity, emotional coldness, extreme solitariness) in 45 per cent. and another third were described as explosive or sensitive, or belonged to minority religious sects. In Stockholm 6 of the 9 males were known to be solitary, homosexual, criminal or vagrant and 2 were alcoholic. Compared with the affective groups both sexes were often narrow, quarrelsome, religious, suspicious or sensitive, unsociable and cold-hearted, and less often kind, thoughtful, affectionate, sociable, even-tempered, nervous, worrying or dependent. Brief sketches of the personalities give, however, a better picture than a list of traits. Examples are given from each of the three clinical groups mentioned above.

Group 1. The personalities of all the patients in this group were very abnormal and the psychotic symptoms appeared to caricature long-standing traits. The following two cases are taken from the Graylingwell material, where of the eight cases, four were over 80 and only two under 70 years of age. Sight or hearing, often both, were severely defective in six. The first case is that of a single woman of 87 who had trained as an art student but never been employed. She had been gay, charming and sociable, but shallow, egocentric and supercilious. She had never had any love affairs and though she had many acquaintances, had made no friends. For 30 years while they lived together, she had never

kept her sister company in the evenings, but always ate meals out; never done any housework or cooking, never knit, sewed, or gone to the cinema or theatre. Her only interests were Christian Science literature and meetings. Admission to hospital was arranged because of the emergence over a period of two months of paranoid ideas, centring on the sister. For one year previously this patient had shown some deterioration in memory and in habits, also in sight and hearing, but had been sufficiently integrated mentally to act energetically, and appropriately considering her delusions, by visiting her solicitor on several occasions in order to change her will. She was found to be correctly orientated. Four years later she is still alive and expressing bizarre delusions of a persecutory and grandiose kind, but is clean in her personal hygiene.

The second case is that of a single woman, aged 82, who had worked successfully as a school teacher and later as a film scenario writer. She had been once engaged, late in life. Usually pleasant to meet and talk with, courageous and energetic, she was very difficult if annoyed or frustrated in any way, wilful, a mischief-maker, prejudiced against doctors, and later in life, suspicious. After the death of a brother she lived alone with a collection of animals. Was summarized by a niece as a "hopeless crank, tiresome, eccentric, and prone to violent rages". The illness was of insidious onset. For some years before admission she had lived alone in sordid conditions, accusing now this person now that of ill-treating her, stealing her money and poisoning her food. She was disposed to wander and gave vent to outbursts of rage when attempts were made to restrain her. Yet she was found to have a fair memory and to be correctly orientated, despite being almost blind and very deaf. She died after 2½ years, shortly after having a "stroke". At autopsy the main findings were atheroma of the major cerebral arteries and renal arteriosclerosis (the brain was hardened uncut and the report is not yet available).

Group 2. Here the personalities were less eccentric and abnormalities were hinted at rather than described in full-blooded terms. In one case a woman whose character was eulogized by her husband (who suffered from folie à deux) was said by a nephew to have "always seemed queer and not quite normal". She suffered from asthma and hypertension and had been confined for long periods to her house which she shared with her husband and with two psychotic tenants who lived on the floor above. After some years of this situation, she began to seal the doors and windows to keep out "poisonous fumes" and believed that she was being hypnotized by one of her psychotic neighbours.

Isolation was however the most common form of stress in this group. The patients were women and they were all either unmarried or widowed at the time of falling ill. The psychosis featured ideas of eviction or robbery, sometimes with erotic elements. Three cases may be cited briefly. A widow, aged 74, had made a serious suicidal attempt nine years after the death of her husband, and later developed a paranoid psychosis with very vivid auditory hallucinations. She had been a capable woman of pleasant, even temperament, who had contracted a childless marriage to a man twenty years older than herself. Up to the time of marriage she had been a strict Baptist, but afterwards had adhered to many different religious sects, which she always abandoned after a short time. A feature of her married life was that she and her husband had never settled anywhere but had continually moved home from one town to another. Another patient was aged 79, having lived alone since the death of her husband and her only son some ten years previously. She had always been very correct, prim, Victorian, and conversant with medical folklore and fallacious theories about

causation of illness. Admission to hospital took place after she was found wandering in the road in a nightgown, looking for imaginary men who, she believed, were constantly entering her house at night, tormenting her and stealing her food, furniture and keys. A third patient, aged 72, was cheerful and friendly but touchy, had a horror of hospitals, was obstinate and self-willed and very independent, and ultra-conservative in her attitude to modern conveniences. She lived in a cottage with oil lamps and stoves and gradually became a solitary recluse, but was visited regularly once a year by a half-sister. In her illness she heard the voice of a brother from Australia, and believed that her half-sister was stealing her money and persecuting her.

TABLE IV

Number of single and widowed women living alone

(1) Stockholm patients

	Affective disorder			Paraphrenia		
	S	W	T	S	W	T
Alone	2	5	7	16	3	19
Not alone	12	15	27	15	5	20
Total	14	20	34	31	8	39

$\chi = 6 \cdot 258$ df=1 P=<0·02>0·01

(2) Graylingwell patients

	Affective disorder			Paraphrenia		
	S	W	T	S	W	T
Alone	16	10	26	10	8	18
Not alone	37	41	78	7	3	10
Total	53	51	104*	17	11	28

$\chi = >12 \cdot 0$ df=1 P=<0·01

* 5 cases excluded, not known.

Group 3. In this group also good and bad traits often co-existed in the same patient, but environmental conditions were relatively favourable. The patients differed from those in Group 1, in that the illness was much more sharply defined from the previous personality, and sometimes arose without any premonition. Thus a twice-married woman of 65 had been gay, cheerful, lively and talkative when young, dressed well and liked going out, and was also a competent housewife, but had no communal interest whatever and never made real friends. A year after her second marriage at the age of 64 she suddenly complained that the spirits of her deceased relatives were following her and threatening to murder her. A single woman of 83, living with a sister, was strong-willed, independent, energetic, versatile and capable, also kind and fond of children and with a sense of humour; she was never moody or over-anxious. But she belonged to a religious sect called The Brides of Christ, and led a life regulated by its principles by which marriage and sexual intercourse were forbidden absolutely. Six weeks before admission she began to believe that the child living in the upstairs flat was being tortured and calling to her for help, and rapidly built up an elaborate delusional system in which the child became her adopted son. Descriptions of other patients read: "jealous", "stubborn and headstrong", "took violent dislikes to people", "erratic and impulsive, and very obstinate", "never made friends, dictatorial,

very sensitive, imaginative, sulky, with narrow interests". A spinster aged 78 was "very domineering, independent, active, tactless, particular and precise, a perfect lady, but with a vicarious interest in sex". This patient was living in lodgings as a paying guest. The first symptom of illness noticed was that she would come downstairs only half-dressed, "to show off her figure". Later she developed a belief that men entered her bed at night and that she was having syphilis injected into her eyes by the landlady.

On the whole the personalities in Group 2 were more normal than in the other groups.

In both the Graylingwell and Stockholm cases there was evidence of psychosexual abnormality. In addition to the large proportion of unmarried patients, those who had married often did so late in life, or were frigid, had few children, were very jealous of their husbands, or cold and unloving mothers and sometimes took a violent dislike to their step-children.

The general conclusions were drawn that abnormalities of personality were present in a large proportion of the patients and were probably related both to the frequent failure to marry, the low fertility and the social isolation, as well as to the actual psychosis.

(ii) *Personality factors related to failure to marry and "isolation"*

The question arises, are the abnormal and stressful social circumstances which many paraphrenics experience accidental, or do they reflect a primary anomaly of personality? Such circumstances may arise from causes over which a person has no control, or they may be self-created, brought about wholly or in part by his own temperamental peculiarities. Of the factors already discussed deafness and physical illness, which render communication difficult, are probably unrelated to the personality. On the other hand "social isolation' might well be mainly due to personal eccentricity. The detailed case histories which suggested that for many patients isolation was the preferred mode of existence or else brought about by their "difficult" behaviour, made this a likely explanation. Some had for years deliberately avoided any close relationships. Others through the tolerance and sense of responsibility shown by a relative had escaped total isolation—yet had fallen ill.

TABLE V

"Social isolation" among single and widowed women

Graylingwell patients

	Affective disorder			Paraphrenia		
	S	W	T	S	W	T
"Isolated"	3	3	6	9	6	15
Not	50	48	98	8	5	13
Total	53	51	104*	17	11	28

$\chi^2 = >12{\cdot}0$ df=1 $P = <0{\cdot}01$

* 5 cases excluded, not known.

In order to test further this hypothesis that a primary personality disorder was one cause of isolation in paraphrenic patients the social histories of a group of *unmarried* women admitted to Graylingwell Hospital when aged 60 or over, suffering from affective and organic psychoses, were examined to determine the frequency of traits such as explosive temper, awkwardness in human relationships, egocentricity, or extreme independence, which could have accounted to

some extent for their failure to marry. Single people are known to form a high proportion of those admitted to mental hospital in old age and we wished to obtain some estimate of the frequency of "isolating" personality traits and of actual isolation among elderly unmarried patients in general. The records showed that of 55 patients about half showed such traits. But they were found far less frequently among the married or widowed. Therefore while personality factors of this kind may well be associated with failure to marry, and perhaps with falling ill, they are evidently not peculiar to paraphrenics. The second question, the frequency of isolation among these "difficult" unmarried patients with affective or organic psychoses, also found a definite answer. Taking "isolation" to be present when a patient was living alone or in a lodging-house or hotel where she had not taken root, was not working and was not in close or regular touch with a relative or friend, it was found that 6 and possibly 9 of the 17 unmarried paraphrenic patients (35–50 per cent.), but only one or possibly two (about 7 per cent.) of the patients with other conditions were isolated. A similar difference between patients with paraphrenia and with affective disorder was found among *widows*. Hence the oddities of personality probably related to the unmarried state of many paraphrenic patients do not wholly explain their "isolation".

It is quite likely that important differences in personality of qualitative kind and with a closer bearing on the risk of social isolation may have existed but were not brought to light by our crude methods of assessment. Be this as it may, as far as the present analysis goes, the poverty of human contact suffered by our paraphrenic patients is only partly explained by inherent personality traits and further reasons for their isolation have to be sought.

The role of deafness which was observed to recur frequently at an early stage of our studies clearly called for investigation. It was found in 41 per cent. (7 of 17 cases) of unmarried paraphrenics, but in only 3 (11 per cent.) of the 27 patients with abnormal personalities who did not suffer from paraphrenia. Deafness was also more frequent among widowed paraphrenics, since 4 out of 10 were severely deaf, and it seems very unlikely that such a severe degree of deafness was overlooked in the other group where hearing defect was noted in only 3 out of 54 cases. The added factor of deafness had probably played some part in deciding that temperamental difficulties would result in isolation in one group of unmarried patients, the paraphrenics, but not in the other. The role of other contributory factors was suggested by the finding that several extremely "difficult" patients had succeeded in avoiding isolation having been tolerated at home over many years by close relatives. Did the paraphrenics have fewer relatives on average than the other groups?

TABLE VI

Position of patients in own sibship

Graylingwell	Affective	Paraphrenic	Both Groups
Eldest	44	3	47
Youngest	19	14	33
Intermediate	66	12	78
Total	129*	29†	158

$\chi^2 = 17{\cdot}05$ df=2 P=<·01

* Excluding 13 not known, and 3 only children.

† Excluding 9 not known and 1 only child.

TABLE VII

(*a*) *Living sibs: all women patients*

Graylingwell G.H. / Stockholm STM.	Affective disorder			Paraphrenia		
	G.H.	STM.	T	G.H.	STM.	T
With sibs	72	22	94	25	31	56
Without sibs	14	5	19	10	16	26
Totals	86	27	113*	35	47	82
Mean Ages			70·91			70·49

$\chi^2=5{\cdot}938$ df=1 P=<·02>·01.

* Omitting age-group 60–64.

(*b*) *Living children: married and widowed woman*

Graylingwell G.H. / Stockholm STM.	Affective Disorder			Paraphrenia		
	G.H.	STM.	T	G.H.	STM.	T
With children	63	41	104	12	11	23
Without children ..	24	6	30	10	6	16
Totals	87*	47	134*	22	17	39

$\chi^2=5{\cdot}374$ df=1 P=<0·05>0·02.

* 3 cases excluded, not known.

(*a*) *Living sibs.* Both at Graylingwell and in Stockholm paraphrenics had fewer surviving sibs than patients with affective disorder, who, after excluding those under 65, were found to have a similar mean age (Table VIIa). Nearly one-third of all women paraphrenics had no sibs living and the average number per patient was fewer (1·7) than among the affectives (average 2·2), only 17 per cent. of whom were without sibs. Of those patients with abnormal personalities, but without paraphrenia, referred to above (whose mean age was found to be about 1 year higher than that of the paraphrenics) only 11 per cent. had no surviving sibs and the average number of sibs per patient was 2·4. That the existence of surviving sibs did protect these affective and organic cases from risk of isolation is shown by the fact that nearly half were living with their sisters.

When the matter of sibs was being looked into, an interesting and unexpected finding came to light. It has an obvious bearing on the likelihood of having sibs still living and may go some way towards explaining the difference between the two groups in respect of isolation. Of the 39 Graylingwell paraphrenics 14 had occupied the youngest position in their own sibship, the position of 9 was unknown, and only 3 were eldest, whereas among 129 affectives, 19 were the youngest, 44 the eldest and in 13 their position was not known. In Stockholm these peculiarities of place in sibship were not observed, but the discrepancy may be due to several factors operating in Sweden in the 19th century, such as the comparatively high rate of infant and child mortality, the frequent presence of half and step-sibs and the common custom of "boarding out". These would all tend to obscure the possible effects of order of birth. (See Table VI).

(*b*). In view of these findings it was thought worth while also to make a count of *living children* among ever-married patients, with the following results. (Table VIIb). At Graylingwell, paraphrenics had on average 1·0 living children

compared with an average of 2·0 living children among affectives. Among ever-married patients 45 per cent. of paraphrenics had no living children compared with 32 per cent. in the other group. In Stockholm the same differences were noted; ever-married paraphrenics were childless in 33 per cent. of cases, with an average of 1·5 children, affectives in only 12 per cent., with an average of 2·0 children. In this case, since the difference is due to the lower fertility of paraphrenics, personality defects may be thought of as acting indirectly, by tending to cause postponement of marriage till late in life and in other ways also to restrict the size of families. In any case here is still one more factor decided in early life yet impairing the chances of avoiding isolation and desolation in senescence.

In deciding whether an individual is forced into isolation in old age or not, the positive qualities of the personality, the capacity for warmth and ease in human contact, for giving and evoking affection may be quite as important, if not more so, than the negative attributes for which we have in the present context been comparing paraphrenics and controls. The description of personality traits already given points to there indeed being a difference in respect of just these attributes of premorbid personality between those who developed paraphrenia and those with affective disorder. There is one objective finding which confirms this view and underlines the importance of longstanding personality defects in deciding the isolation of paraphrenics. In the Stockholm material over one-quarter of the women had had illegitimate children but only two married the fathers, whereas among the patients with affective disorder the much smaller numbers with illegitimate children legitimized their union almost without exception. This reflects in a striking manner the differences in the affective life and personal adjustment of paraphrenic and affective cases some half a century before breakdown in old age. But the original hypothesis that isolation was a consequence of personality defects requires modification, since unrelated intrinsic factors—deafness, fewer surviving sibs, smaller families and fewer children who survived had clearly made a substantial contribution.

(iii) *Heredity*

In a review of the literature Strömgren (1938) found the risk of developing schizophrenia among the sibs of schizophrenics to be 6–12 per cent. while Kallmann (1956) reported the risk among the children to be 10–22 per cent. In this material the corresponding risk among sibs and children was much lower. Only one case, of a sib with an untreated paranoid illness beginning in middle age, was found at Graylingwell, although some of the six relatives reported to have been mentally ill with unknown conditions may have suffered from schizophrenia. In Stockholm where the investigation was very complete, the risk among sibs and children combined was only $3 \cdot 4 \pm 1 \cdot 2$ per cent. (Kay, 1959). These findings make it unlikely that precisely the same hereditary factors operate both in schizophrenia and "late paraphrenia".

But there were 8 additional cases (3 from Stockholm and 5 from Graylingwell) where a parent or sib had developed a paranoid illness late in life (i.e., after the generally employed "risk-period" of 20–50 years of age). Three of these were treated in mental hospitals and showed the characteristic picture of late paraphrenia. The existence of these 8 cases among the relatives of 99 patients may be compared with an incidence of only 2 similar cases among the families of over 200 patients with affective disorder. Schultz (1930) also found a rather high risk (6 per cent.) of "senile persecution mania" among the sibs of a group of patients suffering from senile psychoses with paranoid colouring, although

the risk for schizophrenia proper was only 1·7 per cent. among the sibs and children combined. Paranoid or schizoid psychopathy were also more common among the relatives in our paraphrenic group, while depressive psychoses were rare.

We conclude therefore that in late paraphrenia some predisposition to mental illness due to heredity does exist. But the observed risks among relatives are difficult to reconcile with any *simple* monogenic mode of inheritance. We are inclined to favour a multifactorial hypothesis, which has the advantage of allowing ample scope for the operation of environmental and other exogenous factors, which we believe to be important. Further, the high incidence personality deviations would accord most readily with such a theory. Further consideration is given to these matters below.

Discussion

(1) *What contribution does organic cerebral degeneration play in late paraphrenia?*

All classificatory systems in psychiatry have serious shortcomings which are inevitable at the present stage of development of knowledge. The weakness of the Kraepelinian system, which forms the basis of most classifications, is that it is based upon two principles. According to one, mental disorders are divided on the basis of certain psychological symptoms and signs into "organic" and "functional" categories; according to the other, division into the same two categories depends on the presence or absence of structural disease, whether cerebral or somatic. This dual system leads to ambiguities which deserve careful analysis. For example, where "neurasthenic", depressive or manic symptoms develop in close association with some infective illness such as influenza, it is customary to regard the mental disturbance as symptomatic: the chronic paranoid psychoses of epileptics are called epileptic psychoses, those of alcoholics and drug addicts, toxic psychoses, and so on.

Some important considerations are overlooked when this nomenclature is employed. Thus if knowledge of the associated organic factor had been withheld, differential diagnosis of these conditions from "functional" depressive, manic and schizophrenic illnesses would have been impossible in many cases. The closeness with which these "organic" psychoses may resemble schizophrenic illness has been recently illustrated in a particularly clear and cogent manner by the revelation that many chronic amphetamine addicts are mistaken for schizophrenics. Three of seven cases seen within the last 2½ years at our clinic had been previously given deep insulin coma therapy and one of the three had had a prefrontal leucotomy carried out at a famous psychiatric university clinic (Beamish and Kiloh, 1960).

In the past, attempts have been made to accommodate such facts within the theory that those who responded to organic disease with "functional" symptoms of this nature were genetically predisposed to do so. The schizophrenic-like psychoses of epileptics, alcoholics and drug addicts were, in other words, due to a coexistence of two phenomena, epilepsy or addiction on the one hand, and on the other the constitutional predisposition peculiar to schizophrenics. Genetic studies by Slater and Beard in epilepsy (1959), by Benedetti in alcoholic hallucinosis (1952) and clinical investigations into amphetamine psychoses by Connell (1958) and others, have made such simple theories untenable. Although such "functional" syndromes in the setting of cerebral or metabolic disease are relatively uncommon, recent observations have shown that their relevance for

the functional group of mental disorders is indubitable and that they may have an important bearing upon aetiological problems in this field.

Among the mental disorders of the aged the dual system of classification has led to particular difficulties. Here we are most prone to encounter depressive psychoses after an attack of pneumonia, manic episodes after surgical operations, paranoid disorders with or without physical illness in old people with a mild memory defect or any one of these syndromes in patients with peripheral and retinal arteriosclerosis, or perhaps hypertension and a mild cerebrovascular accident some years previously.

Such common associations have led to most of these diseases of whatever kind being regarded as essentially organic in aetiology when they have begun after the age of 65 years, although the specific psychiatric manifestations of cerebral disease may be absent. That some degree of real overlap exists between functional and organic psychoses in senescence, as at all ages (*vide supra*), is not in question. But this overlap, together with the fact that senile and arteriosclerotic change will be a relatively common finding in any group of old people after long periods of observation, has tended to perpetuate the view that cerebral disease has a ubiquitous aetiological role in old age mental disorder.

Recent follow-up and neuro-pathological studies have made such views untenable. In the first place Roth and Morrissey (1952) showed that there were striking differences in the rate of mortality between paraphrenic and organic groups of cases. The present study, on a different material and from two separate sources, has amply confirmed this earlier work. After two years and five years the rate of mortality was respectively only 12 per cent. and 34 per cent. among the paraphrenics, with good agreement in the two series, compared with a mortality of 63 per cent. and 81 per cent. in the organic cases collected from the Stockholm records. At Graylingwell the rate in this group was still higher, i.e., 80 per cent. after two years (Roth, 1955). After ten years half the Stockholm paraphrenics were still alive whereas nearly all the organic cases had died. The size of these differences seems to exclude organic cerebral disease of the kind found in the organic dementias as a major factor in late paraphrenia, but does not entirely contravert the view that early or mild degrees of cerebral change may be responsible.

This argument, as well as the objection that the organic cases are an older group, is met by comparison of the actual length of survival with the mean expectation of life for a group of comparable age and sex in the Stockholm population. Among paraphrenics the period of survival was almost normal, among organic cases it was only one-quarter as long.

Yet despite this long survival, it is probable that some contribution is in fact made by cerebral disease. This follows from the existence of those few cases, about 5 per cent., that exhibited somatic signs of cerebral disease in connection with the onset of the psychosis or within a space of three or four years, and *prima facie* from the eventual appearance of cerebrovascular or presumptive senile change in 21 per cent. of cases in the Stockholm series. That paranoid symptoms and organic changes often coexist is apparent from the frequency of paranoid colouring in those old age psychoses that are clearly of organic origin. But the contribution is probably small. The figure of 21 per cent. is in all probability far too high an estimate of the importance of cerebral damage as a causative factor, for the following two reasons. In the first place, evidence of senile change did not appear until at least five years, and in the majority of cases not until 10 years or more, after admission. The picture then was often indistinguishable from that of "secondary dementia", a condition well known to

occur in chronic mental illness after prolonged institutionalization, accentuated in this instance by the effects of normal age-specific mental changes, most of the patients being by then in their eighties, and frequently by deafness.

Secondly, reference may be made to the work of Corsellis (1960) who made a systematic examination of the brains of groups of patients dying in a mental hospital. Corsellis found that the frequency of gross cerebral lesions was significantly higher in those diagnostic groups where the mean interval between admission to hospital and death was less than five years. These were the groups of senile and arteriosclerotic psychoses and a group showing features of both of these conditions. For example the incidence of gross cerebral vascular change was 48 per cent., of cerebral atrophy, 42 per cent. Among Corsellis' groups with a diagnosis of functional psychosis (affective, schizophrenic and paranoid), among whom the mean age of onset was well before the senium and, as was the case among our paraphrenics, the period of hospitalization was of long duration, gross cerebrovascular lesions were found at autopsy in the much lower but still considerable proportion of 15 per cent., and cerebral atrophy in 16 per cent. The incidence of such lesions increased with age in both the functional and organic groups, but the difference between the groups remained consistent at all ages and the incidence found among the former may provisionally be taken, according to Corsellis (1960), to represent the expectation in the normal population. It is not very surprising therefore that amongst the paraphrenics, whose mean age at death was over 75 years, clinical signs of cerebrovascular disease or of senile mental change should have appeared in some 21 per cent. of cases.

Hence when allowance has been made for the normal hazards of growing old, the only cases in which we can be reasonably certain that organic factors have played some part in causation are the 5 per cent. of patients in whom neurological signs appeared about the time of the beginning of the illness or within one or two years. It is of interest however that in most of those with neurological signs at onset, organic psychiatric features were completely lacking. We have here a counterpart of those schizophreniform psychoses of earlier life in which, despite an organic aetiological basis in the form of dextroamphetamine intoxication, alcoholism or epilepsy, the psychological characteristics of cerebral disease are absent or minimal. It is just possible that cerebral changes have an aetiological significance that extends beyond the 5 per cent. of paraphrenic cases already mentioned. Although the 21 per cent. of cases who, after many years of observation, exhibit senile or arteriosclerotic changes, represent little if any excess over normal risk of cerebral degeneration in this age group, we cannot exclude the possibility that in a group of susceptible personalities such changes contribute to the disease process. In other words, whereas normal cerebral degeneration might never bring the patient under psychiatric care, in the case of a schizoid personality, the result might be a paraphrenic illness which is usually an imperative cause for admission to hospital. Any such cerebral degenerative changes must have a quite different qualitative character or be of a quite different order of subtlety from those active in the senile and arteriosclerotic psychoses proper. It is not possible otherwise to account for the gross discrepancy in life expectation between the two groups of cases, for the paraphrenic group appears to enjoy a normal life-span. But some of the possibilities discussed here are clearly matters for further enquiry.

(2) *Do the paraphrenias of late life constitute a homogeneous clinical group?*

There was considerable variation in such factors as the prominence or absence of severe environmental stresses, premorbid personality defects, and of

deafness, so that the material lends itself at first sight to subdivision in a number of ways. At Graylingwell, out of 42 patients, there were, for example, ten patients, all females, in whom the illness had arisen in a particularly abnormal environmental setting; this had coloured the content of the delusions and hallucinations in an easily understood manner (Group 2). Eight of these cases had lived alone for a very long period, but only one was deaf. In a second group of 24 patients, delusions of a much more bizarre character were present and these were far less clearly intelligible in terms of the environmental stress endured by the patient. Serious adversity had been less often experienced by these patients and only eight had been living alone, but as many as 11 were deaf. This group included six patients in whom a very marked depressive colouring was present in the early phase of the illness. These cases certainly deserve special mention in that a temporary response to E.C.T. was usually obtained and although the paranoid delusions and hallucinations eventually became the predominant features of the illness, the prognosis for discharge from hospital and subsequent survival in the community was relatively good. There were also 5 females in whom the presence of symptoms generally associated with schizophrenia in early life was the outstanding feature. Three of these were the only cases in the material in whom the illness had been of very long duration. They were in their late seventies or eighties, but the illness had probably commenced 20 years earlier. Four showed a marked incoherence of thought and speech, one patient being in addition deaf and inaccessible. Another patient showed a stupor of catatonic type. All these cases were regarded as mainly endogenous paraphrenias.

The points of similarity between patients are however far more impressive than the differences. In all the condition was dominated by delusions and hallucinations of an essentially similar character and pursued a chronic course. Examples of suspicious, hostile, arrogant, eccentric or extremely solitary personalities were found in each. Moreover, although there was a certain amount of variation with respect to the type of exogenous factor that had contributed to the illness, it was clear that most of these exogenous factors had tended to undermine adjustment in a similar way and in the many cases in which several of these factors co-existed, they had acted in an additive fashion. The unmarried state, few surviving sibs, few children, scarce and infrequent social contacts owing to circumstances, personality difficulties or both, deafness and infirmity, all have a great deal in common in the adverse effects that they produce.

There is one group of eight patients which, in the light of observations to date, seems to be more distinct from the rest of the material than any other group which can be tentatively created on descriptive grounds. In these cases the differentiation between the overall behaviour disturbances characteristic of personality and those which arise as the result of illness seem to merge insensibly with one another. These are lifelong paranoid personalities whose history shows them to have become increasingly embroiled in conflicts and antagonism with those in their environment. They are often described by their relatives as "not ill but exaggeratedly themselves" and "I always expected this (meaning hospital admission) to happen". It is of some interest that an independent objectively definable feature characterizes all these patients; in no patient of this group were hallucinations present. However, in the light of the progress of these cases, the description of paranoid reaction in the sense of a potentialy reversible response to vicissitudes by over-sensitive or suspicious personalities, would hardly be accurate. In many of their basic personality features, the frequency of social

isolation and of deafness, and the progressive course and inveterate nature of the illness there are important common features of the remaining cases. While for research purposes these cases deserve some independent consideration, it is doubtful whether they deserve at present a nosological status wholly apart from the paraphrenias of late life. We are saying in effect that we are unable to draw any hard and fast distinction between the paranoid reactions and paranoid schizophrenias of old age.

(3) *Can the paraphrenias of late life be legitimately classed with the schizophrenias?*

Even if the small sub-group of eight cases discussed above is regarded as akin to the paranoid reactions described by Kretchmer (1927) under the heading of "*Sensitive Beziehungswahn*" this question has still to be raised in connection with the greater part of the material. It has to be remembered also that not all workers would accept the paranoid reactions of early life as wholly distinct from schizophrenia and irrelevant for the aetiological problems of this disorder. The common features linking all the groups of cases described in this paper have already been discussed.

It seems to us that the diagnosis of schizophrenia must be based on an operational definition which incorporates all those symptoms and signs which, according to the general consensus of opinion, constitute the "primary" or "process" features of the condition. As the aetiological basis of the condition in unknown, it seems illogical to apply aetiological criteria, as is done when cases which follow some psychological stress or even a physical illness are excluded from the schizophrenias. So far as is known, cases precipitated in this manner do not, when symptoms of process type are present, behave any differently in their pattern of outcome from the general run of schizophrenics. Again, while genetic studies have proved themselves valuable research tools, it is unwise in the present state of knowledge to separate a group from the schizophrenias on the basis of genetic findings alone. The attempt to differentiate groups of cases of more or less favourable prognosis within the schizophrenias, constitutes an important line of enquiry. But prognostic criteria, since they can only be effectively applied *post factum* in the individual case, must clearly play a role of secondary importance in the diagnosis of schizophrenia. Nor should we assume at the present stage of development in knowledge that any real hard and fast dividing line separates groups of cases of good and bad prognosis.

If the kinship of a group of cases with the schizophrenias must be decided, as we believe, by the presence or absence of the primary or process symptoms of schizophrenia, the main group of the paraphrenic cases we have studied, with their ideas of influence, primary delusions, hallucinations in clear consciousness and oddities and at times incongruity of affect, must be regarded as schizophrenic. Any aetiological factors identified may be reasonably assumed to have a certain amount of relevance for problems of aetiology among the schizophrenias as a whole.

(4) *Are the genetic factors shown to contribute to the causation of schizophrenia in early life present in the paraphrenias?*

The aetiological factors for which there is most conclusive evidence, as derived from twin studies and other genetic investigations, are the genetic ones. It is not implied that these are the only factors, but that they make an important contribution seems undeniable in the light of the findings of Kallmann, Feingold and Bondy (1951), Slater (1953) and others. The question arises whether the paraphrenias are genetically uniform with the schizophrenias of early life. It

has been shown that this is not the case. If a period of risk similar to that generally employed in genetic investigation into schizophrenia is used as a basis for calculation, the morbid risk for schizophrenia among the first-degree relations of paraphrenics, though somewhat increased, does not differ to a significant extent from that of the population at large. We deal therefore with a group of individuals in whom the genetic loading for schizophrenic illness proper is relatively small. On the other hand, there were six families (if second-degree relatives are included) with more than one secondary case of schizophrenia, and eight instances of secondary cases with late-developing paranoid psychosis similar to that in the propositae, where the explanation that the psychosis arose entirely through the effects of a similarly adverse environment appears highly improbable. Some genetic contribution to causation is therefore likely.

The available data are insufficient to justify an attempt to define precisely the mode of inheritance. A crucial question is the homogeneity of the material. Does it consist of a mixture of exogenous and mainly endogenous cases, clinically indistinguishable? An admixture of this kind has been suggested to account for the low morbidity among relatives in the affective disorders of late onset (Stenstedt, 1959; Kay, 1960) and the same question has been raised for schizophrenia itself (see later). Our own argument that there are exogenous causes of schizophrenia is quite compatible with this hypothesis. But certain features of the illness suggest that the hereditary loading is more evenly spread. These are the frequency of pre-morbid personality deviations and the colouring they lend to the clinical picture, and the apparently close interdependence and interaction of all causal factors—long-standing social difficulties such as social isolation, physical defect such as deafness, previous personality pattern and precipitating stresses—in the evolution of the disorder. The amount of susceptibility to breakdown as reflected by personality deficiencies and degree of environmental stress shows considerable quantitative variation, and these factors appear to some extent to be inversely correlated with one another. Moreover, we have a number of distinct factors—constitutional, social, psychological and organic—in varying combinations, but probably acting additively to produce an essentially similar phenomenon. If this is the true situation, then taken together with the very low morbidity risk for mental illness among the relatives, it is more suggestive of the effects of polygenes than of the specific monohybrid type of inheritance often held to underlie schizophrenia. We need to know much more about the frequency and nature of abnormal traits of personality among the relatives of schizophrenics, paraphrenics and in control groups.

(5) *What is the nature of the relationship between social isolation and paraphrenic illness?*

The question that arises is whether the social isolation of the paraphrenic patient before illness is a cause of his ultimate breakdown or whether both isolation and the mental illness which develops in late life are expressions of some common factor, perhaps a lifelong anomaly of personality, determined by constitutional factors. An almost identical question has been asked in relation to a great many psychiatric disorders. Thus Durkheim's classical studies of the incidence of suicide, some 60 years ago, led him to conclude that this varied inversely with the degree of social cohesion in the community. Wherever ties arising from beliefs, aspirations and activities held or practised in common with the social group were weakened, the chances of suicide were adversely affected. Investigating suicide in London, Sainsbury (1955) was able to show that variation of suicide rate in the different boroughs followed a pattern which

Durkheim might have predicted. There were significant correlations between suicide rate and indices of social isolation, social disorganization and social mobility within the boroughs; some of the highest rates had been registered in Chelsea, Hampstead and St. Marylebone where material adversity was uncommon. Predominantly working-class boroughs such as Stepney, Poplar and Bethnal Green, where a relatively high degree of social cohesion prevailed, had a low suicide rate. Sainsbury was inclined to attribute a causal role to isolation in relation to suicide and the weight of evidence certainly favoured this view. But the extent to which differences in the suicide rate flow from the tendency of those who are mentally ill and potentially suicidal to drift into those areas where they can lead an anonymous existence freed from social ties and responsibilities, has yet to receive adequate investigation.

The findings in certain other areas where this question has been raised call for a systematic enquiry to disentangle the network of cause and effect. Thus it has been known for some time that immigrants have a relatively high incidence of mental disorder, as reflected by admission to hospital (Malzberg and Lee, 1956). Yet Ødegaard (1932, 1953, 1959) has adduced a large amount of evidence in favour of the view that this arises from the fact that those with abnormal personalities and in whom there is a high risk of psychotic breakdown are especially prone to migrate. He has also assembled data showing that the high incidence of mental disorder among those who fail to marry and those who work in certain occupations may be attributed to a process of social selection, rather than to any ill-effects exerted by loneliness and isolation. Those with deviant personalities fail in the competition for spouses and occupations and are also especially prone to become psychotic. In other words it is the social failure of those predisposed to become mentally ill that tends to isolate them, rather than the isolation which engenders mental illness.

A similar controversy has been in progress in relation to the other social factors in the causation of schizophrenia. In their classical survey of first admission rates to mental hospital in different parts of Chicago, Faris and Dunham (1939) discovered that a disproportionately large number of schizophrenics not only belonged to the lowest social class, but came from the central lodging house areas of the city or its "hobohemia" where social cohesion was minimal. (Mental disorder in old age and delinquency showed a similar distribution). Once again, opinions have differed as to whether this could be a cause of schizophrenic illness, an effect, or both. The work of Hollingshead and Redlich (1953) has shown that a disproportionately large contribution to the number of schizophrenics under treatment was made by the lowest social classes, whereas the upper classes contributed less than their expected number of schizophrenics. In further studies (1954, 1958) they examined the possibility that this was due to a downward social drift of schizophrenics who had been demoted to unskilled jobs on account of the incompetence that was caused by the disease. Morrison (1959) found that the fathers of schizophrenics were a representative sample of the normal population as far as occupation was concerned, suggesting that drift had in fact occurred. Moreover, Hare (1956) was able to confirm some of the findings of Faris and Dunham in a study of mental health in Bristol, and concluded that schizophrenics were to be found in social seclusion largely because they segregated themselves and severed their social ties after their illness had begun to undermine their social adjustment. On the other hand, he also concluded that to a lesser extent their isolation had been enforced by circumstances which their own actions had done nothing to produce.

The essential complement to statistical studies of the kind we have been discussing is the detailed investigation of individual cases of disorders in which social stresses, such as isolation, are suspected to operate. It seems unlikely at first sight that mental disorders appearing for the first time in old age can be partly attributable to lifelong personality defects which have also served to create social difficulties for the individual. Yet the findings suggest that this constitutes a large part of the explanation. Approximately half of the personalities were hostile and suspicious, hard and arrogant, shy, solitary or eccentric in the extreme, the incidence of some such abnormal personalities being significantly higher than among the control groups. There are two particularly good examples that illustrate the way in which such individuals may segregate themselves rather than become isolated by accident or force of circumstance. The first is the contrasting behaviour of paraphrenic and affective women following illegitimate pregnancies. The second example is provided by the fact that adherence to minority religious groups was relatively common among the paranoid cases, far more rare in the affective groups.

These findings therefore lend a certain amount of support for the views of Ødegaard in that the unmarried state appears more as one reflection of the abnormal personality of paraphrenics than as a cause of it or of the illness that follows. One may also suspect that the isolation of such individuals may be self-created and that deliberate choice, rather than chance had possibly decided that few children should be born to them. Indeed clinical experience teaches that attempts to break down the isolation of such individuals are prone to meet with singularly little success. One has in fact to ask whether these individuals could have remained sociably viable until late life if circumstances had forced them into close association with other people, or whether their immunity from frank breakdown until senescence may not have owed something to their success in keeping social contacts at arm's length. Further studies may help to shed light on this important question. However, even if the most extreme interpretation possible is placed on the available facts, not all the factors making for seclusion can be considered to be self-created. It was through no exercise of personal choice that they had so often been youngest children with few surviving siblings in old age, nor could their frequent deafness have been conditioned by their anomalies of personality.

It would seem therefore that the isolation in which so many of our patients were found had been fashioned by the additive effect of many different factors. It is not possible to decide the relative importance of these with any degree of precision, but the oddities of personality found in so many patients loom largest in the picture and probably made the largest single contribution. We have raised the possibility that, far from being a cause, the solitary and eccentric ways of these patients may have been the defensive and self-protective responses of individuals poorly equipped for emotional relationships. On the other hand, having formed few friendships in early life, their social assets must have depreciated at a far steeper rate than would be the case in the general run of people. An attitude of determined and aggressive independence which helps to render the individual socially viable in early life might well contribute to make adjustment and integration impossible in old age. Hence, although isolation may initially have been an expression of the special needs and preferences of schizoid personalities, it is likely to have turned secondarily into a cause and by its cumulative effect over the years, steadily eroded the patient's resources for adjustment in late life.

The fact that in some cases breakdown finally occurs at about the time

that a number of extraneous influences have begun to drive the patients further into isolation, lends some confirmation to this view (we are referring here to the death of relations, progress of deafness, the advent of physical infirmity). It must be remembered also that personality is only one of the factors in the situation. In most of the cases severe anomalies of personality were present. But a few patients in Group 2 appeared to be relatively normal personalities in whom an unusually intense aggregation of extraneous influences had enforced isolation. In others still, a situation intermediate between these two extremes emerged in that environmental and physical handicaps of moderate severity were associated with a premorbid personality and peculiarities that were not particularly severe. The conclusion that emerges is that the theory propounded by Faris and Dunham (1939) that isolation and lack of social communication were causes of schizophrenia is an oversimplification when applied to the paraphrenias of the aged. Their segregation often results from lifelong personality traits which are a long-drawn-out prelude of, and intimately related to, their psychotic breakdowns in senescence. But to a small extent at any rate they are victims of circumstance, and isolation would appear to this extent to be a cause of paraphrenic illness. To a greater extent, as far as the present data are concerned, it is merely a consequence of personality anomalies that also portend a schizophrenia in late life.

(6) *What is the bearing of these findings upon aetiological theories in relation to schizophrenia?*

It is held by many workers that schizophrenia is a condition determined by specific genes whose manifestation may be influenced, though only within rather narrow limits, by environmental factors. Sharp differences in the incidence of the condition in different social classes have recently been clearly demonstrated, but the significance of these findings is far from clear and the view that they reflect an environmental factor in the causation of schizophrenia has certainly not won general acceptance. In paraphrenia we appear to have a very different situation as far as aetiology is concerned. Genetic factors play some part, but are less important and it seems unlikely that they are of the specific simple monohybrid kind postulated for schizophrenia. The prominence of environmental, physical and exogenous factors, the varying combinations in which they are found, the additive fashion in which personality deviation and environmental stress interact to create ill-effects, suggest a disorder of multifactorial aetiology. The hereditary basis of such a condition is also likely to be multi-factorial, that is, polygenic. And in the predisposed personalities of paraphrenics we are probably dealing with extreme deviations of temperament and character, rather than any rare and specific constitution.

One possible way of reconciling these facts is to conclude that the constellation of symptoms called schizophrenia has different causes in early and late life and that the environmental factors and sensory deprivation identified as causal agents in paraphrenia are irrelevant to theories about the aetiology of schizophrenia before the age of sixty. This formulation would be cogent but for the fact that on closer examination the present evidence relating to the causation of schizophrenia shows some interesting parallels with the situation described in this paper in late paraphrenia.

Recent investigations tend to suggest that even in the group of cases in which schizophrenic symptoms occur in the absence of organic disease, genetic factors are not only insufficient, but perhaps not always necessary causes of the illness. Thus Rosenthal's examination of Slater's material (1953) has revealed

that in the families of identical twins, where only one twin was schizophrenic, the genetic loading with schizophrenia is extremely low, while in the families of concordant twins it is very high. He suggested that there may be two aetiologically distinct types of schizophrenia, the one caused by genetic and the other by environmental factors. The evidence from this line of investigation alone does not point altogether in one direction, for in a similar study some years ago, Luxemburger (1939) registered a quite opposite finding. Further studies of twin material will be necessary to decide the issue. However, some allowance is made for the evidence pointing to a difference in social class incidence and for the role of social isolation, the view that the causes of schizophrenia cover a broad spectrum ranging from the predominantly genetic at one extreme, to the predominantly exogenous and environmental at the other seems a reasonable and cogent one. The genetic studies of Kolle (1931) among the relatives of patients with "paranoia" and of paranoid psychopaths are perhaps relevant in this context.

These facts relating to aetiology make it necessary to consider other possibilities for the mode of inheritance for schizophrenia than those which have hitherto been accepted by most workers in this field. The theory of simple dominance and of simple recessivity both have their adherents, but it would be generally agreed that neither adequately explains all the family data relating to schizophrenia. In fact, the theory that schizophrenia has a simple, monohybrid, genetic basis has had to be buttressed by a number of *ad hoc* hypotheses such as "inhibition of manifestation", the action of "genetic modifiers" and a partial recessivity so as to fit the data with the theoretical requirements of Mendelian ratios. Some of these genetic hypotheses involve the notion of an effect by polygenes on such characteristics as age of onset, degree of affective colouring, the course run by the disease and other features. All such hypotheses are elaborate and not wholly satisfactory. In the light of the new evidence about environmental factors, the simpler alternative that the predisposition to schizophrenic illness may be a graded character depending on quantitative variation, merits more consideration than it has received. The argument against this view, that the schizophrenic illness itself presents as a step-like "all-or-none" phenomenon, is not conclusive, since threshold effects may be involved. Moreover, disputed borderline cases, formes frustes and psychopathic paranoid and schizoid personalities are not uncommon, and form a link between the normal and the indubitably abnormal. In three common psychiatric conditions—the subcultural variety of mental defect (Fraser Roberts, 1950), obsessional neurosis (Rüdin 1953) and epilepsy (Harvald 1951)—inheritance has been shown to be, probably, multi-factorial, and in each of these conditions environmental or other exogenous factors are certainly important. On the other hand those mental abnormalities known without doubt to be due to major genes are rare and very much less influenced by external factors. Methods for identifying a predisposition to schizophrenia, by means of biochemical, physiological or possibly psychometric tests, in the same way as intelligence is revealed by mental testing and subclinical epilepsy by the EEG, no longer appear hopelessly remote in the light of recent advances. When such methods become practicable we may find that the predisposition to schizophrenia and its latent forms, which are at present accounted for by heterozygosity or by inhibition of manifestation, are possibly graded characteristics even though manifest schizophrenic illness may show all the features of a pathological phenomenon.

Genetic factors are probably more important in the causation of schizophrenia in early life than in old age while the reverse is probably true for the

environmental factors in causation. But in the light of the above discussion the differences may well be quantitative rather than qualitative. Further, if the kinship of late paraphrenia and the schizophrenias is accepted, the differences in incidence according to social class in the latter and the isolation in which many schizophrenics are found to live, are unlikely to be wholly due to drift down the social scale or to some bias in the selection of cases. To some extent adverse social circumstances are likely to prove causes (as well as consequences) of schizophrenic breakdown in earlier life, although their contribution will probably be less important here than in the late paraphrenias.

Summary

1. A clinical follow-up and genetic study has been made of 99 patients aged 60 years and over (with a mean age of about 70) suffering from "late paraphrenia". The patients consist of two groups, one from the Psychiatric Hospital, Stockholm (1931–1940) and the other from Graylingwell Hospital, Chichester, Sussex (1951–1955). Patients with affective and organic disorders of similar age and admitted during the same periods are used for comparison. Both paraphrenic groups show the same characteristics which may be summarized as follows:

(*i*) Females predominate over males in the ratio of about 7:1, i.e., significantly in excess of expectation. In both sexes unmarried patients are significantly more, and married patients less common than in the general population of similar age. Fertility among ever-married patients is low.

(*ii*) An examination of the background of the illness shows that significantly more paraphrenics were living alone at the time of falling ill than those with affective disorder. This appears to have been due to several factors, i.e., the frequency of the unmarried state and the low fertility among the paraphrenics, who also had fewer surviving sibs.

(*iii*) Of those living alone, many more patients with paraphrenia than with affective disorder were socially "isolated". Three factors seem to be responsible: (1) deafness (2) abnormalities of personality (3) few surviving relatives. Deafness of some degree was found in 40 per cent. of the Graylingwell paraphrenics and of severe degree in some 15 per cent. of all cases, with a much lower incidence among the other groups. Personality traits among paraphrenics and affectives also differed markedly. Among the former they were commonly of paranoid-schizoid type and contributed substantially to failure to marry, social isolation and probably to the development of the psychosis itself. But factors unconnected with the personality, such as absence of relatives, played some part in deciding whether isolation did or did not occur.

(*iv*) Except in one subgroup, referred to below, the clinical picture is remarkably uniform and is characterized by the presence of many schizophrenia-like disorders of thought, mood and volition, by relatively good preservation of formal intellect, personality and memory, and by conspicuous hallucinations. In about 20 per cent. of the Graylingwell cases hallucinosis was entirely absent and the illness appeared to represent a caricaturing of deviating personality traits of long standing; these cases may perhaps be regarded as "paranoid reactions" to the physical and social consequences of growing old. But exogenous factors (deafness, isolation) or personality attributes are always to a greater or lesser extent in evidence, and it is doubtful if any clear lines of

demarcation between groups of cases really exist. At this stage therefore it seems far more profitable to treat the "late paraphrenias" as a whole.

(*v*) An inherited predisposition to late paraphrenia must be postulated, but this is likely to be of lesser degree than in schizophrenia occurring early in life. The mode of inheritance is probably multifacturial.

(*vi*) A pathological degree of cerebral degeneration is probably related to the onset of psychosis in not more than 5 per cent. of cases. Normal age-specific mental changes may have been responsible in a further proportion of cases for a caricaturing of previous abnormalities of personality and to this extent have contributed to the development of the psychosis.

(*vii*) The course of the illness tends to be chronic and the changes of schizophrenic type usually become more prominent, but sometimes a "burnt out" state with residual defects is seen. Occasionally the illness merges after many years into a state difficult to distinguish from that of senile dementia (12 per cent.). Signs of focal cerebral disease, including isolated seizures, eventually appear in a further 9 per cent. The mean life span is only very slightly shorter than normal, a fact which distinguishes late paraphrenia sharply from senile and arteriosclerotic psychoses where life expectation is less than one-quarter of the normal.

2. The clinical homogeneity of the group, its relationship to schizophrenia, the influence of genetic and organic factors, and the roles of social isolation, lack of relatives, deafness, and abnormalities of the personality are discussed.

3. It is concluded that late paraphrenia has to be regarded as the mode of manifestation of schizophrenia in old age. The aetiological factors identified in late paraphrenia are therefore likely to have some relevance for the problem of causation of schizophrenia itself. It is considered that the setting of social isolation in which a high proportion of paraphrenic cases are found is due to some extent to a self-segregation of personalities for whom social contact and communication are difficult or stressful. But the evidence suggests that isolation must be attributed to some extent to accidental factors such as deafness, position in sibship or scantiness of surviving relations. The accumulating effects of such factors may account for final breakdown in old age. At younger ages also, the onset of schizophrenia is likely sometimes to be due to isolation, and not merely a cause of it. The findings perhaps also have some bearing on the general problem of social isolation in relation to mental illness.

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Appendix

In the following case-histories, the psychological tests used, with the method of scoring, were those described by Hopkins and Roth (1953). The scores given are "test quotients", where "100" represents the average score among affective groups aged 60 years and over.

The first case is that of a highly intelligent woman with life-long personality difficulties. At the time of admission she had become very deaf.

Case 1. Widow, aged 77. Admitted to Graylingwell Hospital 27.3.52–21.6.52 (V.P.). Had recently accused son-in-law of stealing her insurance policy and threatened to call in the police. *Mental state*—Circumstantial, suspicious, with paranoid allegations about daughter and son-in-law, had brought all private papers with her "to prevent theft". *Physically*—Very deaf, well-nourished. B.P. 160/80. Para-oesophageal diaphragmatic hernia (X-ray). *Psychological testing*—All tests above range for senile psychosis (test quotients: vocabulary 112, matrices 114, digit span 101, information 108). *Course*—Treated with "modified insulin". Depressed at times, lacked energy. Discharged to Nursing Home.

Family History—(Informant, daughter). F. d. 78, lay preacher and printer. M. d. 78. Patient 9/9 sibs, only survivor; 7 lived to be over 70. One S. alcoholic, d. young. One S. senile psychosis?

Past History—Brought up in very poor family. Won scholarships to school and University (latter not taken up for economic reasons). As child, rejected by fellow pupils on account of class differences. Elementary school teacher. Married aged 23 (1897), but husband left home 1913 and died 1922. Frequent quarrels. Two children, daughter (informant), aged 45, son aged 44. Both married, intelligent and mentally normal. *Physical health*—Good. *Personality*—Had always felt dissatisfied, aggrieved and inferior to others because of her impecunious background. Had felt unwanted as a child (was youngest of 9 sibs). Daughter described her as highly-strung, independent to a fault, very religious in a puritanical way but rather a "canting Christian", egocentric, possessive, jealous of all her family and interfering in her children's affairs; very sensitive and hating to meet people, but when shielded from contacts would complain that daughter was ashamed of her; very thorough and conscientious, faddy, particular and meticulous in the home, and parsimonious.

Onset of Present Condition—Onset indefinite. At daughter's wedding in 1939 had made a hysterical scene, telling son-in-law that he was taking her "most cherished possession". After this, lived first with daughter for "three months' hell", and then in her son's house, but quarrelled with both and afterwards lived for a time on her own in "solitary isolation". Then returned to daughter, staying in a room on her own, doing everything for herself, and never speaking to her son-in-law.

The illness was not sharply demarcated from the personality. Some three years previously, she had become more depressed and had had outbursts of weeping and self-pity when she said she had "lived too long". She visited numerous doctors, and thought she had various illnesses. She complained of losing things, said they had been stolen and finally accused son-in-law of stealing her insurance policy.

Follow up—After discharge was unable to settle anywhere. After a few days, invariably began to make a flood of complaints, e.g., that the food was tampered with, or her belongings being stolen, and on one occasion informed the police. At her son's house, she complained that she had caught V.D. from the lavatory seat and had telephoned the Medical Officer of Health. She was *readmitted* on 14.1.53 (C.P.). She was emotional, not consistently depressed, gave a good account of recent events, and memory and orientation were fairly good. Physically, there were obesity and signs of peripheral arteriosclerosis. B.P. was 190/100. Mentally, she was garrulous, complained of wrongful detention, was "the victim of a plot" and lacked altogether any insight. She showed obsessional attention to cleanliness and believed that she was contaminated. Psychological re-testing (19.6.53) showed little change (vocabulary 102, matrices 115, information 104). Vision was excellent in both eyes. After nine months, affect was noted to be incongruous, although at times she was agitated and depressed; said that her clothes were torn at night and that harmful substances were put into them. Memory was good and habits clean. A few months later, she was mute and resistive, refusing all food, refusing to leave her bed and incontinent. She died (19.10.54) within a few days of a seizure with localized convulsions. Autopsy showed diffuse suppurative bronchitis, chronic cystitis and senile changes with early atheroma of coronary arteries and aorta and moderate granular contraction of both kidneys.

Comment—This case belongs to Group 1, i.e., a paranoid psychosis without hallucinations developing in a markedly abnormal personality. She showed a life-long difficulty with human relationships, which began in her childhood, and later resulted in disruption of her marriage. Finally, this made it impossible for her children to continue to offer her a home. She escaped isolation, up to a point, entirely through the tolerance of others, but even so was undoubtedly isolated in an emotional sense and was a painful burden to all those who tried to help her. Hospital admission, however, became necessary only in old age, when with the advent of age-specific mental changes and deafness, her grievances and accusations became increasingly absurd and uninhibited. She eventually became negativistic and inaccessible and death was

probably hastened by her refusal to take food. Because of the almost terminal occurrence of seizures, the case is included among those developing cerebro-vascular signs but their connection with the psychosis is doubtful. It was only during the last 9 months of life, at the age of 79, that deterioration of habits occurred, but this coincided with marked physical decline. The brain appeared normal but was hardened uncut.

The following case showed markedly asocial personality traits, and was socially isolated. Some improvement occurred in hospital.

Case 2. Unmarried woman, aged 75. Admitted to Graylingwell Hospital 26.7.52. C.P. In-patient. Certificate stated that she was hallucinated, complained that the neighbours were dropping bombs outside her door and filling the house with deadly smoke. Rambling and disconnected in conversation. According to the police, patient was constantly writing letters (all nonsensical), accusing the neighbours, alleging the house had been broken into and things stolen. Also inventing malicious gossip. There was evidence that paranoid delusions had been present for 2½ years. *Mental state*—Garrulous, circumstantial. Schizophrenic thought disorder. Inclined to tears. Talked of persecution by landlord and neighbours, describing gunpowder explosions, rappings on door at night and pollution of the drains. Correctly orientated, memory fair. *Physically*—Thin, kyphotic. Heart enlarged, B.P. 200/110. *Psychological testing*—(15.9.52). Vocabulary 106, matrices 90, memory 104; no deterioration. *Course*—Patient believed she was the victim of persecution instigated by her landlord, who wanted to get rid of her so that he could sell the house. 1951, abdominal aneurysm diagnosed. Osteo-arthritis R. hip. 1953, hypochondriacal with many aches and pains, paranoid delusions remaining. Mood placid and cheerful, and behaviour sociable. Engaged in occupational therapy, helping in ward. Can carry on rational conversation. 1954, obese, B.P. 180/105. Considered to be "fit for discharge when suitable accommodation can be found". Reliable worker. Vision with glasses, R.V. 6/12, L.V. 6/9. Early R. cataract. Fundi normal except for arteriosclerosis. 1955, complaining of pain in hips, knees, abdomen. Barium meal showed functioning gastro-enterostomy without obstruction but with small hiatus hernia. Hypochondriasis now the only psychiatric abnormality. Patient later developed signs of avitaminosis, with dysphagia. Subsequently she did not change mentally but required treatment for hypochromic anaemia, cardiac failure and for a leaking abdominal aneurysm.

Family History—(Informants, niece and sister-in-law). F. d. 52, tuberculosis. M. d. 52, heart failure. Patient 6/6 siblings. All dead at the time of admission. One S. odd and religious.

Past History—Normal childhood. Village school till 14. Bright. Domestic service, including housekeeping all her life. Sex—"let down once, never worried again". Lived for 25 years in former employer's house. *Physical health*—Hypertensive with enlarged heart, and generalized osteo-arthritis. Hysterectomy. Gastro-enterostomy and several laparotomies 1939. *Personality*—"The odd one out". Trouble-maker and bad mixer. No friends or interests, and did not get on with family. Self-centred. Good at her work, clean and tidy.

Comment—This case belongs to Group 2, owing to the obvious connection between the content of her delusions and her position as an isolated, single woman, living alone. It is clear that personality traits contributed to her isolation, and it is likely that constitutional factors interacted with environmental ones to bring about the paranoid illness. It is of interest that her mental state improved very considerably during her stay in hospital, where she became quite well-integrated. The parts, if any, played by avitaminosis and physical illness are of minor importance, and the courses of the mental and physical conditions ran independently. At the most, avitaminosis amounted to one extrinsic factor.

In Case 3, affective symptoms were very prominent and there was an excellent initial response to E.C.T., so that schizophrenic features that in retrospect were obvious, tended to be brushed aside.

Case 3. Married woman, aged 61. Admitted to Graylingwell 1.12.54–3.2.55. Eighteen months ago, when daughter married and left home, patient began to think there was jealous talk among the neighbours, that two people had a house to themselves. Became afraid of being turned out of house. Three months ago, had a fall and was confined to house for 3 weeks, and because of this was unable to help with daughter's baby, although previously had done so. Six weeks ago, sat up in bed listening to voices, could hear neighbours talking about her through wall. Became frightened of electricity, thought neighbours could kill her with a ray. On 3 weeks' holiday was symptom-free, but on return symptoms immediately recurred. Admitted after a few days of acute terror. *Mental state*—Talk hesitant but coherent. Mood very apprehensive, also depressed but apparently not deeply so. Described persecution by neighbours by means of a ray which followed her from room to room, played on her when she sat on W.C. and gave her a "red glow". Neighbours could see into her room and knew what she ate. Voices told her she had not fed her husband properly. *Physically*—B.P. 220/110. Wt. 7 st. Asthenic build. *Course*—Recovered after 6 E.C.T. Memory of events was vague, and these were described as "all silly". A diagnosis of "depression with paranoid features" was entertained.

Family History—(Informant, husband). F. d. 49. Farm worker. M., no information. Patient 3/3 sibs. Brother and sister alive and well. Four younger half-sibs. No history of family illness known.

Past History—Childhood unhappy. Mother left home because father was cohabiting with another woman whom he later married. This woman said to have been brutal to the 3 children, and patient was placed under institutional care by the N.S.P.C.C. at the age of 8. Her two sibs were sent elsewhere. From the age of 14, she worked in domestic service and in factories. Married aged 25. Happy but sexually frigid. Husband 6 years younger. Wanted children but finally had to adopt a child—now aged 23. *Physical health*—Hypertensive. Menopause about 50, following period of menorrhagia, and curettage. *Personality*—Even-tempered, but highly-strung and worrying. Good-natured and kind. Poor mixer, very reserved, no outside interests. Some obsessional traits. A little suspicious. Methodist. *Home*—Living in Council house, husband on night-shift. *Previous Mental Illness*—Some years ago, had a period with much nervous dyspepsia. 3 years ago, became very nervous and suffered from indigestion and anorexia at a time when daughter was being courted by a married man.

Follow up—Re-admitted 14.2.55—28.6.55 (V.P.). Two weeks' recurrence of auditory hallucinations, the voices of neighbours saying she ought to be "locked up", that she ill-treated husband and stole money. No insight. Depressed and agitated with poor appetite. *Physically*—B.P. 240/140. Wt. 6 st. 8 lb. Improved greatly, in all respects, after 6 E.C.T. Urinary infection treated. Relapsed after 3 weeks. Found to be anaemic (Hb 70 per cent.) and to have occult blood in stools. Improved on iron but developed ideas of unworthiness, that other patients said she smelled. Improved, with limited insight, after 8 E.C.T. and discharged.

Re-admitted 27.9.55—18.1.56 (V.P.). Few months' elapse with similar ideas of persecution by neighbours who were threatening to shoot her. Correctly orientated, agitated and depressed. No insight at all. Wt. 6 st. 3 lb. B.P. 210/120. After 7 E.C.T. improved but had no insight into persecution. After few weeks was again hallucinated at night. After 4 further E.C.T. remained "well".

Re-admitted 8.3.56—14.3.56. On this occasion, presented herself voluntarily for "legal advice" on account of persecution by neighbours. B.P. 220/140. Heard voices saying she was mad and also that sister was mad; that husband was the "father of their adopted child". Voices followed her everywhere day and night. Sleep disturbed but appetite excellent. No insight whatever, refused treatment and discharged herself. Later history unknown.

Comment—This patient showed marked depressive features at the onset of the illness, and recovered after E.C.T., apparently with insight. The later course is, however marked by, the prominence of hallucinations and persecutory delusions, and by a decreasing response to E.C.T. In retrospect it is clear that even at the first admission schizophrenic symptoms were evident, although these had tended to be overlooked or explained away after the initial recovery. As regards aetiology, this is a case in which none of the usual factors, such as isolation, deafness, gross personality deviations nor heredity can be clearly demonstrated. However, there was probably some contribution by several of these factors. The family history is incompletely known. Early childhood experiences were very adverse, and the personality anxious and restricted. The illness developed during a period of strain when the existence of a housing shortage may have given rise to gossip and jealousy among the neighbours, and when the husband was away at night and the daughter had left home. In addition, there was a deterioration in physical health. But such a severe, chronic, paranoid-hallucinatory psychosis can hardly be supposed to have arisen without some predisposition, and a hint of this may be seen in the asthenic bodily habitus and narrow, reserved and somewhat suspicious personality of this patient.

Case 4. Married woman, aged 65. Admitted to Graylingwell Hospital 23.10.54. In-patient. (C.P.). The certificate stated that patient complained of 3 spirits following her everywhere. One, that of her sister, was determined to murder her. Refused to go home as she was in fear of her life. Engaged spirits in conversation and called them by name. According to husband, had not been to bed for 2 nights because of constant conversation with spirits. Duration, 3 days. *Mental state*—As above. Constantly hallucinated by voices of spirits of dead relatives threatening her instant end. Replied to voices during interview. *Physically*—Pyknic, obese (11 st. 3 lb.). B.P. 180/95. Old fracture L. wrist with deformity. Deaf, difficult to make contact with.

Family History—(Informants, daughter and husband). No information about parents. Patient 4/4 sibs, only survivor. One S. d. 2 years ago. Sibs "quarrelled whenever they met". In particular, patient had quarrelled with her eldest sister.

Past History—Childhood spent in happy surroundings. Probationer in fever hospital. Married Captain in Hussars. Widowed 18 years ago. Two children, son killed 1939, daughter married. Remarried July, 1953. *Personality*—Gay, cheerful, lively, talkative, dressed well and liked going out. Competent housewife and cook. No communal activities, or real friends.

Health—Deaf since childhood.

Course and follow up—After 9 ECT was still deluded and hallucinated. 1955, wt. 8 st. 11 lb. Constantly hallucinated. Frequently tried to abscond. Deafness interfered greatly with contact. Believed husband had had her illegally detained so that he could meet other woman. Visited at night by ghosts who talked to her. Solitary but clean in habits and occupied herself usefully. 1956, still hallucinated and kept awake by yells and screams. Believed medical staff could watch her through the ceiling. 1957, fatuously smiling, hallucinated, almost totally

deaf. Wt. 10 st. Largactil 50 mg. t.d.s. 1959, still frequently hallucinated and expressing a variety of persecutory delusions.

Comment—There was an abrupt onset with auditory hallucinations in a woman who had been deaf since childhood. No premonitory symptoms were described and the patient is certainly likely to have been in normal health at the time of her remarriage 15 months previously. Yet despite the acute onset and prompt treatment the illness ran a chronic course, with eventual flattening of affect, though without gross deterioration. There is no evidence of specific predisposition (the family history is incomplete) but the personality was superficial and egocentric and, perhaps owing partly to the severe deafness, the capacity to form friendly relationships was impaired. Earlier disagreements within her family evidently provided the basis for much of the content of the psychosis. Some weight must also be attached to the late second marriage, since this presumably changed her mode of life and posed new problems of adjustment. A paranoid psychosis beginning soon after a marriage contracted very late in life has been seen occasionally in other cases.

In the following case a florid paraphrenic illness, beginning with depression, developed after the sudden death of a son.

Case 5. Widow, aged 65. Admitted at own request to psychiatric hospital in Stockholm, 19.9.32. Well until son's accidental death 1 year previously, when she became very depressed. At Christmas, 1931, felt something strange in stomach "like electricity", which kept her awake at night and gave her no peace. Also had trouble with micturition and with giddiness. Said it was other people who "worked in her", perhaps some neighbours who did not like her. Later thought it was chiefly two people who persecuted her. 17.9.32, had a short attack with unconsciousness and blueness of the face, lasting a few minutes. Talked loudly to herself (hallucinated?). *Mental state*—Since summer had felt "persecuted by everybody"; indoors by two men in next flat, and outside by cars and by people staring at her. Neighbours and passers-by slandered her, and in some way caused her stomach to be upset. In hospital, a strange method of counting was employed, which she did not understand. *Physically*—Good general condition. *Course*—Occupied, but did not converse spontaneously. Complained that all sorts of people stood outside and denounced her; that they lay under her bed and disturbed her at night. Occasionally was irritable and querulous. Transferred to another mental hospital 8.12.32. Hospital diagnosis "Insania Presenilis".

Family History—F. d. 70, alcoholic. M. d. 81. Patient 3/6 siblings. One S. had 2 "strokes". no psychosis.

Past History—Married aged 20 to a bricklayer, alcoholic, died in 1900. 5 children, all living, except a son who died in January, 1931. After husband's death, patient worked very hard to keep the home going for the 3 youngest children, the others going to a Children's Home. One son criminal psychopath, one son alcoholic. One daughter treated twice with E.C.T. for manic-depressive psychosis, one daughter very nervous, one daughter admitted to mental hospital on 11 occasions, diagnosis either psychopathic personality with psychotic episodes, or schizophrenia. *Physical health*—Good. *Personality*—Sulky and withdrawn, cold and resentful, often beat the children.

Follow up—Remained in hospital until death 13 years later. Throughout auditorily hallucinated and persecuted. Complained of being forced to watch films of naked men and women having sexual intercourse; heard vulgar words, was violently raped, etc. Completely without insight. In 1935, showed rather poor orientation for time and place, but not to a gross degree. In 1938, showed gross delusions about identities, and a year later said she had given birth to a child in the night; later still that her bed was full of small children, spoke of a little boy inside her left arm, and prepared sandwiches for him. Thought disorder prominent, but at times she was able to reply coherently. Died after sustaining fracture of an arm, aged nearly 79, cause of death being arteriosclerosis, marasmus and pneumonia. Post-mortem: "diffuse cerebral atrophy of senile type with small gyri and broad sulci" (weight of brain 1,200 gm). No gross local changes found on section. Mild, universal arteriosclerosis.

Comment. The description of the post-mortem appearance of the brain can be accounted for by the advanced age of this patient, and in the absence of microscopic evidence, cannot be considered to be definitely indicative of pathological cerebral atrophy. Moreover, the illness had lasted 14 years at the time of death, and this length of survival is rarely if ever seen in cases of senile dementia. The illness may be attributed to the impact of the son's sudden death in a woman of schizoid personality, who was predisposed to mental illness. That some specific predisposition to mental illness existed is suggested by the fact that two daughters had suffered from a psychosis, one probably schizophrenia.

The last case shows an insidious onset before the sudden appearance without precipitating cause, of a florid persecutory-hallucinated state.

Case 6. Married woman, aged 60. Admitted at husband's request to psychiatric hospital in Stockholm, 10.10.37. In recent years she had been quiet and brooding; had at times laughed aloud without explanation. On 2.8.37 became obviously ill, had visual hallucinations and hid her belongings. On the day before admission, refused to let her husband into the house, and

when door was broken in by Authorized Officer, tried to strangle him. Found to have a carving knife in her bed.

Mental state—Deluded that her husband was "strange" and wanted to injure her; had hidden her belongings to prevent them being stolen. Thought food smelled of snuff and contained worms; that tapwater made blue marks appear on her hands, so that she dared not wash. People were engaged in directing rays on to her, which she felt in her whole body. She had heard people running round her cottage and banging on doors. In hospital, heard whisperings questioning her about friends and relations. Foreign thoughts were put into her head. Her mood was indifferent, and affect was impaired, and her replies were brief and uninformative. *Physically*—Leptosomatic build, very thin, marked kyphosis. *Course*—After some improvement, discharged home on trial but soon returned and was eventually transferred, unimproved, to a Home for Old People (January, 1938). Hospital diagnosis "Insania Presenilis (paranoid)".

Family History—F. d. 70, stroke. M. d. 75, said to have been psychotic towards end of her life. Patient 5/6 siblings.

Past History—Married twice (1) aged 30 (2) aged 38. First husband died after 5 years, said to have been very quiet and withdrawn. Related to patient. 2 children, of whom one died young. Son was a psychotically disturbed mental defective who was treated in a mental hospital for over 30 years. Second marriage was unhappy and childless. *Personality*—Peculiar, cold, insensitive to others' feelings but over-sensitive herself, uneven in mood; always jealous. Had some musical talent. Not previously treated. Took son's illness very hard.

Follow up. For 5 years she attended to herself well, was acessible, and well-orientated. Occupied herself by playing piano. For the last 3 years of life, her physical state was unsatisfactory, although no definite diagnosis was made. Throughout, she was slovenly, unoccupied and bad tempered, swearing and spitting. There was, however, no evidence of gross dementia or of focal C.N.S. disease. Death in January 1945, when nearly 69, was attributed to chronic myocarditis.

Comment. Unfortunately the nature of the mother's illness could not be ascertained, but the husband, who was related to the patient, was schizoid, and the only son psychotic, as well as mentally subnormal, so that a hereditary predisposition can be strongly suspected. The personality showed both paranoid and schizoid traits, and the second marriage was unhappy and unfruitful. Predisposition seems to be the only identifiable factor in this case.

MORBID JEALOUSY: SOME CLINICAL AND SOCIAL ASPECTS OF A PSYCHIATRIC SYMPTOM

By

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Introduction

Jealousy is more than a psychiatric symptom. Its language is universal: the conduct and feelings of the jealous man and woman have repeatedly drawn the attention of the great observers of human nature, the moralists and the philosophers as well as the poets and the novelists. They have, on the whole, described the reaction more successfully than they have defined it. Even the most celebrated definitions—Descartes' "kind of fear related to a desire to preserve a possession" or Spinoza's "mixture of hate and love", for example—merely illustrate the complexity of a term whose many nuances of meaning can be detected in its roots. The English adjective "jealous" and the noun "jealousy" are derived respectively from the French "jaloux" and "jalousie", both taken from the old Provençal "gilos"; "gilos" in turn may be traced back to the vulgar Latin adjective "zelosus" which comes from the late Latin "zelus" and so indirectly from the Greek ζηλος. In its transmission the word has thus been debased. It has ceased to denote "zeal" or "ardour"; the "noble passion" which stood opposed to "envy" for the Greeks has acquired a pejorative quality. In modern German the distinction is preserved verbally, "Eifersucht" having been formed from the original "Eifer" (zeal) and the suffix "-sucht", which is cognate with "siech", meaning "sickly". Amorous jealousy claims associations of its own. During the seventeenth century the French word "jalousie" acquired the meaning of "blind" or "shutter"; in this sense it entered the English language as a noun in the early nineteenth century; the transmutation is thought to have signified a jocular reference to the suspicious husband or lover who could watch unobserved behind the jalousie; the Italian word 'gelosia" is used in this way as early as the middle of the sixteenth century. In the Scandinavian languages separate words designate amorous jealousy. (1) The Swedish "svartsjuk", literally "black sick", is taken from an old expression which identified jealousy with the wearing of black socks; the Danish "skinsyg", "afraid of getting skin (a rebuff)", harks back to an old link of jealousy with skin which may in turn have been connected with hose or socks. (2) The origin of the colours which are traditionally employed to depict jealousy, especially black, yellow and green, is obscure.

Though the belles-lettres of the world contain many observations of great clinical interest concerning jealous behaviour and motivation it was not until the emergence of psychology and psychiatry as branches of scientific

inquiry during the nineteenth century that a number of states of mind and modes of behaviour associated with jealousy were studied systematically and classified as morbid phenomena. The older psychologists tended to treat the subject within the framework of their personal views on the psychology of emotion: their opinions, in consequence, frequently do no more than reflect their own theoretical constructs. Two examples will suffice. Wundt's tri-dimensional feeling-states compounded of displeasure—pleasure, strain—relaxation and excitement—calm, accounted for jealousy in terms of the elements of the first-named of all three diads; McDougall, on the other hand, regarded the reaction in hormic terms, though he did not accept jealousy as a sentiment so much as "a complex play of painful, because conflicting emotions and tendencies" (3).

Among psychologists the concept of jealousy as one of the human passions has been developed most fully in France where, as Ernest Jones has pointed out, the features of the jealous state of mind have been described with particular subtlety and understanding (4). The admixture of emotions, the affront to self-esteem, the yearning for total possession, the anger, the doubts and the self-torment have all been analysed in themselves and in relationship to each other. To Ribot, the most prominent representative of the French school, "la vie sentimentale" consisted of the affective states, the emotions and the passions proper (5). He regarded the passions as the most complex of his three elements, calling them "prolonged and intellectualized emotions". Jealousy, for Ribot, was a complex state ("un mélange de sentiments") made up of pleasure, anger and chagrin, but he never quite succeeded in fitting it successfully into his elaborate system of affective categories (6). Alongside amorous jealousy he recognized other varieties of jealousy associated with vanity, rivalry and ambition, but he was in favour of confirming the application of the word to certain reactions of adult human beings; with animals and children, he maintained, the response aroused by the fear of dispossession should be classified differently. Other writers have been less circumspect. In his broad review of jealousy as a psychological concept Gesell ranged freely through the animal kingdom, the various phases of the human life cycle and the fields of criminology, pedagogy, anthropology, sociology and pathology. He attempted to avoid many semantic obstacles in his view of jealousy as a ". . . plastic complex which defies the circumscription of a definition" (7). The plastic quality of this view finds its counterpart in the psychological definition of jealousy which has found widest clinical application: "jealousy", according to Freud, "is one of those affective states, like grief, that may be described as normal. If anyone appears to be without it, the inference is justified that it has undergone severe repression and consequently plays all the greater part in his unconscious mental life" (8). The ramifications of this premise will be examined later.

More recent attempts to classify human emotional states have not proved to be satisfactory, largely because of the dearth of experimental evidence (9). In consequence the clinical psychiatrist, unless he belongs to a particular school of psychology, is likely to agree with Whitehorn's commonsense view that ". . . the 'emotions' as we know of them empirically in the clinic and in ordinary life are the expression of sentiments in whose development there has been a large measure of cultural and conventional training" (10). Among these emotions amorous jealousy is of particular clinical significance by virtue of its associations with mental illness. In accordance with general custom discussion in this article will be confined to certain adult responses to real, suspected or imagined sexual infidelity, but even within these limits a full review of the

psychiatric aspects of morbid jealousy would demand an altogether larger canvas. Lagache has pointed out that ". . . there is no 'problem of jealousy' which has given rise to an abundant literature and to controversy as there are problems of hysteria and of hallucinations. The problem of morbid jealousy is scattered throughout the evolution of psychiatric thought" (11). Some of the psychiatric themes which have been most closely related to morbid jealousy justify his verdict: they include the concept of 'monomania'; the psychopathology of chronic alcoholism; the theory and classification of the paranoid states and the psychoanalytical view of homosexuality; Mairet's delineation of emotional "hyperaesthesia"; Jaspers' distinction between the "delusion of jealousy" as "process" and as "personality development"; and the medico-legal problems raised by the crime of passion.

As a feature of mental illness morbid jealousy serves to illustrate Scott Buchanan's view that ". . . in diagnosis the single symptom is radically ambiguous; it belongs to many syndromes, and its only legitimate interpretation demands a thorough exploration of the possible syndromes to which it may belong" (12). The standard textbooks devote little space to a symptom which may be encountered among patients suffering from functional psychoses, psychoneuroses, personality disorders and organic, senile or toxic states. Unfortunately much of the original work on the subject is scattered and not all of it is available in English. It has seemed therefore a useful task to colligate some of the available knowledge in order to outline the outstanding clinical features and to emphasize particularly the concomitant social problems. Illustrative case material is presented separately in the summarized case histories which have been selected from those of patients who have been encountered in the routine practice of one London teaching-hospital and a nearby metropolitan observation unit. Many of the patients had been under the care of other physicians; the diagnoses given in the summaries are those of the individual physicians in charge of the patient. An effort to obtain follow-up information was made in every case, sometimes via the existing hospital facilities, sometimes by personal interviews and sometimes by correspondence.

Clinical (General)

Clinical description has added little to the field which Mairet traversed fifty years ago (13). Within his three broad sub-divisions into hyperaesthetic jealousy, jealous monomania and delusional jealousy he was able to find a place for most of the clinical phenomena. His elaborate and cumbersome system of classification, however, can be replaced profitably by Henri Ey's simple dichotomy into the so-called "delusions of jealousy" and the "small segment of emotionally jealous reactions which develop in the history of some abnormal personalities" (14).

Jealousy is often encountered clinically in a delusional setting, though the term "delusion of jealousy" (Eifersuchtswahn; délire de jalousie) is a misnomer: apart from an illogical conjunction of words it is the fidelity of the partner which is suspected and the delusions, when present, are of infidelity. In its florid form this mistaken belief is held with absolute conviction; in some cases or at some stages it may so dominate the clinical state as to constitute the outstanding indication of disorder. The clinical picture is usually extended further by the efforts of the patient to furnish evidence or proof of his accusations.

His case is then supported by an accumulation of trivial incidents and experiences: everyday events and fluctuations of behaviour, chance encounters in the street, the untidiness of a room, blushing or slips of the tongue, such material is misinterpreted and invested with special meaning. But whereas it is the interpretation placed on such phenomena rather than the phenomena themselves which must be accounted abnormal, other experiences are patently morbid. Among the commonest of these are paranoid ideas associated especially with the belief that the suspected person has been giving the patient substances for the purpose either of poisoning him or of impairing his sexual potency; suspicions that the partner is suffering from venereal disease or has been indulging in sexual intercourse with a third person during the patient's sleep; the conviction that certain physical aspects of the sexual act itself, particularly a tell-tale moistness of the sexual organs, provide evidence of infidelity; and irrational doubts about the paternity of children. The content of the patient's morbid ideas may also be expressed in the form of imaginary visual scenes and in vivid dreams. Hypochondriacal preoccupations before or during the onset of symptoms are commonly present.

Some patients make strenuous efforts to corroborate their suspicions. They may approach lawyers, hire detectives or take other measures appropriate to a justifiable suspicion of infidelity. They may also take extraordinary measures and search for evidence of seminal stains on clothing, bedlinen, chair covers or wherever they believe adultery to have occurred; they may go through letters and find confirmation of their suspicions in innocent phrases; they may make excessive sexual demands in order to prove that the partner is sated or to ensure satiation and so prevent further indulgence. The desire to obtain proof of the offence is often overwhelmingly strong; it appears to be related to a need to resolve a tormenting doubt which in some cases leads to repeated attempts to extort a confession from the partner. Such patients declare this to be the only satisfaction which they demand, but the irrational nature of their request is strikingly demonstrated by the futility of the confession which is occasionally feigned by a blameless but desperate spouse. Attempts to obtain a confession may lead to physical assaults; these also occur during the paroxysms of rage brought about by the supposed misdemeanours and they may result from the patient's belief in the need for vengeance. Aggressive conduct is often followed by periods of intense remorse which may in turn lead to suicidal action.

The clear recognition of these clinical features, only some of which can be expected in an individual case, is of practical importance. They make up abnormal patterns of symptoms and behaviour which render the morbid quality of the jealousy accompanying delusions of infidelity detectable on internal evidence; even when there is a factual basis for his suspicions the abnormality of the patient's reaction should become apparent. This point assumes special significance when the patient seeks legal or other non-medical advice and the more bizarre clinical features are absent.

It is evidence that many of these ideas and experiences may occur also in a non-delusional setting. If it be accepted further that some of these reactions—painful doubt, suspicious awareness of conduct previously regarded as innocent, attempts to obtain proof of guilt and even violence in certain circumstances—can be encountered among substantially healthy individuals who are confronted with reasonable evidence of infidelity on the part of a loved partner, then it is readily understandable why nosological problems arise in respect of the dividing line between "normal" and "abnormal" jealousy. Mairet's concept of hyperaesthetic jealousy as ". . . a readier and more intensive reaction than normal

of jealous passion under the influence of doubt" is taken here to distinguish empirically between the two categories even though the boundary cannot always be demarcated easily. It follows that some of those people who are capable of a morbidly jealous reaction in the absence of delusional beliefs about their partner must be considered abnormal as much by virtue of the facility and intensity with which they react as by the abnormal quality of their reactions. While many of these individuals display other pathological personality traits there are some with nothing more overt than a seeming hyper-irritability on a subject which tactful friends and marital partners learn to avoid. The borderline between such reactions and those of the "normal", understandably jealous individual remains arbitrary in the present state of knowledge.

Between these extremes of a florid delusional state and a morbid readiness to react in a jealous fashion there must be inserted a universe of clinical variants. Though the individual's life-history moulds the content of each clinical picture a number of general factors enter into the phenomenology of every case. These factors include (1) the nature of associated clinical conditions; (2) the patient's personality-structure; (3) the age and sex of the patient; (4) the nature of the relationship which existed between the patient and partner before the onset of symptoms; (5) the tendency of the jealousy-reaction to be phasic and to be exacerbated by the physical proximity of the suspected person; (6) the speed of the development of symptoms. Reference to the more important clinical syndromes will illustrate the influence which these factors may exercise.

Clinical (Special)

A. Morbid Jealousy Associated with Toxic or Organic Cerebral Disorders

Alcoholism constitutes the most widely recognized physical association of morbid jealousy. It was noted in the nineteenth century (15) and given particular prominence by Krafft-Ebbing whose view of morbid jealousy as a predominantly masculine reaction was derived in large measure from the much greater prevalence of alcoholism among men (16). Many writers have described a classical picture which Lewis has condensed: ". . . they (chronic alcoholics) may without passing through an acute hallucinosis, develop delusions of jealousy, which at first are only evident during intoxication but later pass, by way of constant suspicion and efforts to detect infidelity, into definite morbid beliefs, often very tenaciously held, which persist in the intervals when the patient is sober. He accuses his wife of adultery with neighbours or relations and attempts to extort a confession from her; he may treat her brutally, endangering her life. His diminishing potency, his sexual maladjustment, his bad conscience, and his wife's inevitable aversion from him when drunk may play a large part in the development of these delusions of jealousy . . . " (17). But, as this writer goes on to point out, the delusions can ". . . develop also in abstinent men during later life; alcohol and its effects cannot, therefore, be mainly blamed for the psychoses in all cases, even when there is a history of alcoholism".

Attempts have been made to examine in more detail the states of morbid jealousy which are related to alcoholism. Lagache, for example, described eight separate types of reaction among his thirteen alcoholic patients, and Pohlisch has examined the association of morbid jealousy with the paranoid constitution

of some alcoholics (18). The most careful and satisfactory study, however, is that of Kolle who, following Schneider, distinguished clinically between three principal subgroups: (*i*) the reaction of the "jealous drinker"; (*ii*) the "exogenous reaction" (with evidence of cerebral damage), and (*iii*) the reaction of the "delusional drinker". A fourth category of "organically provoked" cases included only three patients, all of whom were in the senium (19). Only the patients in Kolle's third group exhibited a primary delusional process and these fell diagnostically into or near the schizophrenic category. The other two groups displayed less a delusional basis for their jealousy than a "distrustful alertness" which attained conviction at times, especially in states of acute intoxication; the cerebral damage of those drinkers who displayed an "exogenous" reaction modified the symptomatology.

The long and careful follow-up of his cases gives force to Kolle's views. Eleven of his thirteen "jealous drinkers" were followed up for between fourteen and twenty-three years; they developed neither a spread of their ideas nor new psychotic symptoms and not one was re-admitted to hospital; eight of the patients ceased to be addicted to alcohol, and it is of particular interest that six of these eight patients separated from their partners. The prognosis of the "exogenous drinkers" (followed up for between five and nineteen years) was much worse and their mortality rate was high. The twelve "delusional drinkers", followed up for between three and twenty-two years, also did badly; five of them died, one by his own hand and two after years of continuous stay in hospital; another five developed clear-cut schizophrenic illnesses. Kolle also examined the family pedigrees of these patients, their descendants as well as their ascendants. He concluded that the evidence, even though the numbers were small, was in favour of a genetic difference between the illnesses of his "jealous drinkers" and those of "delusional drinkers", and that the latter group bore a close relationship to schizophrenia.

A careful enquiry was made into the drinking history and habits of every patient in the present series of unselected psychiatric cases. In only a small minority was there evidence of excessive consumption of alcohol. Among the established alcoholics the most intimate association of morbid jealousy with bouts of heavy drinking was demonstrated by Case 1, a patient who did not display jealous behaviour before she began drinking or between her bouts. Jealousy and suspicion had featured in the personality of other alcoholics (Cases 2, 3 and 4) but not more prominently than among patients with temperate habits. Case 5 is of particular interest in view of the emphasis which has been laid on the paranoid aspects of alcoholism: over many years of heavy drinking the patient had often entertained delusional ideas about his wife's infidelity, but not until they eventually separated did he come under medical care for the first time, in his fifties, with an episode of alcoholic hallucinosis.

2. *Addiction to Substances Other than Alcohol*

Kraepelin regarded cocainism as one of the conditions most intimately associated with morbid jealousy (20). Cocaine addiction is rare in England today; there were no cases among the patients examined for this study. Characteristically the delusional ideas supervene often, quickly and with force, frequently leading to violence; they may remain in evidence for some time after the disappearance of other symptoms. Addiction to other drugs, e.g., morphine,

probably leads to the development of morbid jealousy only when the patient is also taking either cocaine or alcohol, but in Case 6 the ideas of infidelity which presaged a paranoid illness did not appear until the patient, a grossly disturbed psychopath who had been an alcoholic for many years, became addicted to amphetamine.

3. *Psychiatric Disorders in the Senium*

Psychiatric patients in the older age-group can display morbid jealousy as a prominently incongruous symptom. In 1901 Parant described the variety of its clinical associations (21) which include organic and degenerative cerebral conditions, the late paranoid states and the affective illnesses. In many instances the morbid ideas are accompanied by physical evidence of cerebral disease or by other psychological symptoms but they can open the clinical picture and raise diagnostic problems; morbid jealousy, according to Gruhle, can be most convincing as a seemingly isolated symptom in the senium (22). Jealous traits are not necessarily apparent in the patient's pre-morbid personality. The pathoplastic effect of age on the delusional content probably contributes to the clinical picture, for jealousy is an understandable reaction of the aged; the suggestion that the ideas of infidelity arise directly from the patient's awareness of his waning potency, however, is of specious simplicity (Case 7).

4. *Other Cerebral Disorders*

Morbid jealousy has been described among the symptoms of a number of cerebral pathological processes which include pre-senile dementia, cerebral arteriosclerosis, Huntington's chorea, Parkinson's disease, general paralysis of the insane, and cerebral tumour (23). Among the patients of this series it was prominent in a case of secondary carcinoma (Case 8), of Alzheimer's disease (Case 9), of pan-hypopituitarism (Case 10), of disseminated sclerosis (Case 11) and of temporal lobe epilepsy as a post-ictal phenomenon (Case 11*a*).

B. Morbid Jealousy in Association with the Functional Psychoses

1. *The Schizophrenias and Paranoid States*

Morbid jealousy with delusions of marital infidelity constitutes a well-recognized symptom-complex in schizophrenic illnesses (24). The ideas of infidelity may appear first and remain at the heart of the delusional process, however widespread its exfoliation (Cases 12 and 13); alternatively they may become lost among other morbid ideas as the illness progresses (Cases 14 and 15). In some cases delusions persist for many years with little obvious deterioration of the personality and with few associated symptoms in the absence of mental agitation (Cases 16 and 17). The mode of symptom-development in these patients and its relationship to the pre-morbid personality served originally to illustrate Jaspers' distinction between delusions which develop understandably from the traits of a predisposed individual and the "process" psychosis which attacks a relatively untainted personality (25). The criteria on which this dichotomy was based are met by a sufficiently large number of cases to endow

the distinction with some descriptive value but the categories overlap too often for unreserved application.

Within the congeries of the schizophrenic reactions morbid jealousy is most clearly related to the paranoid group. Examination of the case records of all 181 people attending the Maudsley Hospital as in-patients or out-patients during a three-year period and diagnosed as suffering from "paranoia", "paranoid illness" or "paranoid schizophrenia" showed that 14 per cent. included morbid jealousy among their presenting or most prominent symptoms. So many of the clinical phenomena associated with morbid jealousy are often of a frankly paranoid nature that Lagache has concluded that ". . . whatever the clinical setting the organization of the jealous experience is on a primitive level with paranoid patterns of projection and demand". This view is supported by the cluster of symptoms demonstrated by several patients in the present series (Cases 18, 19, 20, 21, 22, 23): one man (Case 24), who was admitted to hospital with delusional ideas about his wife's infidelity, was discovered to have suffered eleven years before from a clear-cut paranoid psychosis with persecutory delusions unconnected with infidelity.

2. *Affective Psychoses*

Disregarding Richard Burton's classical account of jealousy as a form of "love-melancholy" most modern clinical observers of the depressive reaction have either paid it little attention or even argued against its inclusion among the phenomena of the syndrome (26). Other authors (27, 28) have stressed an association which is clearly illustrated in this series by several patients who were morbidly jealous in the course of major depressive illnesses (Cases 25, 26, 27, 28, 29, 30). Diagnostic practice may account in some measure for disagreement on this issue, especially when there are co-existent paranoid symptoms. The case histories of the patients whose paranoid symptoms were manifested or exacerbated in the course of a depressive illness (Cases 31 and 32) may be contrasted with other primarily paranoid illnesses which were complicated by depressive features (Cases 20 and 33); Case 20 is of particular interest in this regard as that of a man with a long-standing paranoid illness dominated by ideas of persecution whose delusions of infidelity appeared only when he became depressed and were dispelled by a course of electrical treatment which left his paranoid beliefs unaffected. The intimate association which can exist between paranoid and depressive symptoms is clearly illustrated by Cases 34 and 35.

Patients with less severe "reactive" depression are more conveniently considered in Section C. The appearance of morbid jealousy in the course of affectively determined states of excitement is well recognized (29). It has been explained in terms of the patient's interpretation of the sexual partner's failure to satisfy excessive physical demands and as part of the paranoid component of some manic reactions.

C. Morbid Jealousy in Association with Neurotic and Personality Disorders

It is apparent from what has been said about morbid jealousy as a symptom of the major psychotic reactions that an abnormal pre-morbid personality is encountered in many cases. Even when the reaction can be related clearly to a

particular precipitating event, whether this be physical or environmental, there is usually some evidence of unhealthy personality traits having ante-dated the illness. Clinical experience demonstrates also that many patients suffering from the large heterogeneous group of conditions which are loosely classified as the neurotic and personality disorders may become morbidly jealous in the course of their lives without evidence of clear-cut psychotic illnesses. The physical and biological events which Brousseau (30) has emphasized as precipitants in such cases did not figure prominently in this series. The clinical phenomena were more closely linked with inter-personal factors, especially the relationship between the patient and the sexual partner.

The diversity of these patients' reactions is covered inadequately by current systems of nosology. Perhaps the most clearly defined group of personality traits associated with morbid jealousy are those which have been taken to characterize the paranoid or hypoparanoid psychopath (31). Such people display an irritable sensitivity and a wariness in their inter-personal relations which often go with a withdrawn, solitary existence (Case 36) but can be also compatible with a superficially gregarious and over-active mode of life (Case 37). Jealousy constitutes an indissoluble component of their attitude towards the sexual partner. It is readily exacerbated in times of stress and so tends to be episodic in intensity; at the height of the reaction the patients can hold to unshakable delusions of infidelity which usually recede rapidly after the passage of the crisis.

The majority of neurotics and personality deviants in this series were depressed at the time of examination. In Cases 38, 39 and 40 the depressive reaction was understandable in the light of incidents which had evoked suspicion and distress and in Cases 41, 42 and 43 sexual difficulties had played a major role. With most patients, however, the events leading up to the illness had their roots in the evolution of the marriage itself and in the part played by the patient towards its unsatisfactory development (Cases 44, 45, 46 and 47). Between jealous outbursts such patients were nearly all contrite, blaming themselves for having entertained groundless suspicions and for their past conduct. Case 48 demonstrates the appearance of jealousy as a transient phenomenon among other morbid traits. Overt anxiety and phobias were prominent in some instances (Cases 49, 50 and 51) while the insistent nature of admittedly irrational ideas assumed a compulsive character in Cases 52, 53, 54 and 55 in whom frankly obsessional features dominated the clinical picture. A retrospective variant of this reaction, in which the patient had become preoccupied with misconduct which he had previously condoned, is illustrated by Cases 56 and 57; this form of reaction was clearly described by Stefanowski in 1897 (32).

Psychopathology and Social Pathology

The foregoing observations demonstrate that morbid jealousy cannot be regarded as more than a convenient descriptive term which is applied to several forms of psychobiological reaction. Psychiatrists who have studied the psychopathology of these reactions have concentrated in the main on particular features of clinical interest. Kraepelin, for example, suggested that the morbid jealousy of alcoholics followed the inevitable estrangement between husband and wife and many clinicians relate the symptoms to the sexual impotence

associated with chronic alcoholism. Bleuler paid attention to the affective accompaniments of morbid jealousy since, in his view, they constituted the complex which embodied the "wish" in the delusional process (33). Langfeldt has stressed the importance of the reaction among "sensitive individuals with their tendency to suspiciousness, introspection and self-reference" (34). Gruhle has pointed to the disturbance of thinking when obsessional features are prominent. Mairet's conclusions may be taken to exemplify the many attempts which have been made to provide an understandable interpretation of the links between morbid jealousy and paranoid states: "This association of ideas of persecutions and jealousy can be regarded as logical. Firstly, mistrust is at the basis of jealousy, as it is at the basis of the monomania of persecutions. Secondly, the individual who has the fixed idea that his spouse is deceiving him regards himself, naturally, as persecuted by her; it is not surprising therefore that he can extend to others his ideas of persecution. Thirdly, the jealous person with a fixed idea necessarily becomes a persecutor of his spouse, so that it is natural that he can become so for others, when he extends the number of his persecutors". An extension of this reasoning would account for the development of either an overriding desire for revenge or an erotomania.

Clinicians holding to a theoretical framework for the classification of abnormal emotional response have advanced psychopathological formulations in terms of their particular systems. As a modern representative of the French school Borel, for example, recognizes the "psychoses of passion" among which jealousy takes its place as an extreme form of a normally occurring emotion (35). In Kretschmer's schema morbid jealousy is classified among his "expansive" reactions, the patients displaying ". . . a spot in the core of their being, a hypersensitive nervous vulnerability, a buried focus, an old inferiority feeling . . . " (36). The psychoanalytical position was outlined by Freud in his essay on "Certain neurotic mechanisms in jealousy, paranoia and homosexuality" where he described three "layers or stages of jealousy": the first as competitive or normal, the second as projected and the third as delusional. Freud asserted that even normal, competitive jealousy contained an element of homosexuality; projected jealousy, he maintained, sprang from ideas which the patient entertained about his own infidelity; while ". . . delusional jealousy represents an acidulated homosexuality, and rightly takes its place among the classical forms of paranoia". The formula is epitomized in the memorable expression of the patient's conflict about his own feelings for the other man: "I do not love him for she loves him." Psychoanalysts have since added very little to Freud's original postulates. Fenichel, for example, refers to the frustration inherent in the Oedipus complex as being at "the basis of all jealousy" and suggested that the jealous patient was striving to rid himself of impulses towards unfaithfulness and homosexuality by means of projection (37). Melanie Klein has expressed views which are substantially similar, though they are coloured by her own theoretical standpoint—". . . Jealousy is based on the suspicion of a rivalry with the father, who is accused of having taken away the mother's breast, and the mother. The rivalry marks the early stages of the direct and inverted Oedipus complex, which normally arises concurrently with the depressive position in the second quarter of the first year" (38). Seidenberg has proposed a fourth category to be added to Freud's original three: emotional jealousy as "a wish and gratification which the mechanism . . . itself fulfils" (39) and Schmiedeberg has done no more than coin another complex, the "Othello complex" which she suggests should be applied to some syndromes (40).

The psychopathology of morbid jealousy has also been explored by the clinicians who have addressed themselves to the manner in which experience and perception are modified by the mental state of the jealous person. Some have employed psychoanalytical precepts but they have also drawn heavily on neo-phenomenological theory, with its focus on jealousy as "a mode of being" (41). Others have adopted a more eclectic position in their interpretation of the subjective changes and many different aspects of the jealous state of mind have been emphasized, ranging from "the privacy of the experience" (11) to the insecurity of the "wavering world" (14) in which the jealous person's emotion is expressed. Most of these workers represent morbid jealousy as a pathological reaction different in kind from the potential responses of a healthy person inasmuch as it constitutes a form of psychological regression and rests ultimately on a delusional basis. Against this view du Boeuff has argued on phenomenological grounds that a delusional structure does not underlie all pathological jealousy (42) and Minkowski makes allowance for a morbid "jalousie inauthentique" which he considers to be qualitatively different from the genuine "jalousie passionelle" (43).

The patient efforts of investigators who have concentrated on the elucidation of mechanisms have yielded great insight into the mental processes of morbidly jealous people. But although individual patients in this series illustrate many of their observations, it would be difficult to generalize from them without reference to the environmental and interpersonal setting in which the reactions occurred; in no instance could these factors be neglected and in several cases they were of such importance as to justify Lund's view of jealousy as "descriptive less of an emotional state than of a social situation" (44). The influence of broad environmental factors is apparent in such phenomena as the rise in post-war crimes associated with jealousy among ex-servicemen in England or in the increased incidence of patients with delusional jealousy in Holland following periods of economic depression (45). In general, however, the impact of social and cultural factors can be studied more intensively through the marriage-contract or its equivalent. Widespread support can be found in many societies for Havelock Ellis's statement that "the claims of jealousy fall within the claims of conjugal rights" (46). Authority to enforce these obligations can claim scriptural precedent and modern anthropological investigations have illuminated many variants of the socially acceptable responses to real or threatened infidelity, especially when the female partner is taken to be the culprit (47). The attitudes adopted in this situation are determined by emotions which in part reflect transmitted social values and expectations but the patterns of behaviour are so universal that Westermarck, after reviewing the evidence bearing on the customs and laws concerning adultery in several societies, concluded that masculine jealousy was a general human characteristic (48). It is therefore to be expected that the social consequences of jealous behaviour will be felt most keenly in the domestic sphere. The quarrels, accusations, recriminations, suspicions, remorse, verbal abuse and physical assaults are all detrimental to the well-being of the family group and Blacker has drawn attention to the prominent role of jealousy in broken marriage (49).

When an individual displays morbid jealousy the repercussions become still more dramatic. The illnesses of two patients in this series were identified only after their spouses' admission to hospital following suicidal attempts which were directly related to the accusations of infidelity which had been made against them (Cases 58 and 59). A third patient entered hospital from prison to which he had been committed for a homicidal assault on his wife

who was subsequently discovered to be an old paranoid schizophrenic suffering from delusions of infidelity which had led her to torment her husband for many years (Case 60). The domestic discord may involve any or several or a number of social agents: the lawyer, the policeman, the probation officer, the private detective, the official of the citizens' advice bureau or the marriage guidance counsellor played a part in the social histories of the majority of the patients in this series. Intervention of these non-medical intermediaries may not only determine referral to a physician; when effective it can dispense with the need for medical assistance or advice in an incalculable but probably large proportion of cases. A rounded view of the interpersonal difficulties posed by morbid jealousy is therefore difficult to obtain in any clinical sample. Experienced marriage guidance counsellors in particular are probably more familiar than the physician with the frequency of ruptured marital relations. They are also better placed to observe the different ways in which the reaction can become woven into the fabric of the marital relationship, a process which is enhanced by the reluctance of many spouses to interpret the symptoms as indices of mental disturbance. The tendency to regard the manifestations of jealousy as an aspect of the marital transaction constitutes an important determinant of the acceptance of even patently delusional ideas, especially when there has been little spread of symptoms and when a good relationship has previously existed (50). On the basis of his experience at a marriage guidance clinic Revitch has used the term "conjugal paranoia" to describe the difficult situation which arises when one spouse involves the other in a web of delusional ideas (51). The most frequent responses to delusional ideas of infidelity among the partners of patients in this series were incredulity, resentment, fear of assault, depression or remorse for previous misconduct. A realistic appraisal of the morbid nature of the patient's ideas was uncommon even when these were egregious (Cases 60, 61, 62 and 63).

The importance of interpersonal relations stands out even more clearly in the marriages of the neurotics in this series. Slater and Woodside have stressed the "corrosive and ultimately destructive effect" of jealousy in such cases (52). With only a minority of the patients could the reaction be related to past, current or threatened extramural attachments on the part of the spouse; in most instances there had been a long history of an unhappy relationship in which unreasonable jealousy had played a large part. The patients were troubled principally by the thought of what had or might have occurred in the past or by the prospect of what might occur in the future. This uncertainty reflected not only a strong sense of inferiority *vis-à-vis* their marital partners but often a life-long insecurity of which some were explicitly aware (Cases 44, 45, 59 and 64). The role of overtly homosexual conflicts appeared to be relatively unimportant. Whatever the psychopathological basis of their sentiments, however, the patients' conduct was directed invariably towards the subjugation of the spouse and the gratification which they derived was linked closely to the eliciting of an appropriately submissive response (Case 65). The more compliant partners were humiliated by frequent displays of jealous behaviour which reduced their lives to a housebound, isolated routine and stifled their interest in extra-mural activities. The more robust partners resisted this pressure even when it was carried to the point of violence (Cases 66 and 67). Some exploited the situation by feigning indifference or by deliberate provocation (Cases 68, 69 and 70). The remorse which followed the jealous outburst served only to increase the patient's dependence. The interplay of both partners therefore entered into and modified the symptoms and the manifestations of behaviour to such a degree that the

significance of the phenomena in an individual case could not be assessed without an understanding of the relationship between them.

Forensic

Jealousy is a notoriously dangerous passion and constitutes a well-recognized motive for crimes of violence, particularly of a gynocidal nature. While detailed statistics are difficult to obtain it has been established that the majority of murders in this country are committed by men and that their victims are mostly women (53). In his examination of 200 "sane" murderers East found that 46 had killed because of jealousy, an emotion which he put alongside "anger, fear, love, lust, hate and the feeling of possession" as being most frequently associated with murder (54). In a similar vein Brierly has reported that over a two-year period 54 out of 760 murders in Cook County, Illinois, were due to jealousy (55). Morbid forms of the reaction have been recognized as important in the practice of forensic psychiatry since the nineteenth century; it is, for example, apparent even from the scanty clinical data which are included in Gray's study of 125 patients guilty of homicide and attempted homicide who were admitted to a criminal asylum in New York State between 1843 and 1873, that 8 of these patients entertained florid delusions of marital infidelity (56). Particular attention has been paid in the past to the part played by alcohol in such cases. Sullivan has gone so far as to claim that "delusions of sexual jealousy are . . . the characteristic disorder of thought in cases of alcoholic murder with conscious motive" (57). The evidence of other workers, however, indicates that this extreme view is unjustified. Hopwood and Milner found 131 excessive drinkers among 1,000 male patients who were admitted consecutively to Broadmoor Asylum over a twenty-year period, but in fewer than half the cases did they consider alcohol to be of aetiological significance in the clinical history (58). Eighty-one of their patients had been homicidal, 51 having murdered or tried to murder their wives, paramours or sweethearts, but only 33 of these patients suffered from delusions of infidelity, conspiracy or persecution concerning the victim. More recently Mowat has examined the records of the male and female patients admitted to Broadmoor during periods of 20 and 15 years and has found morbid jealousy to have been a significant factor in 12 per cent. and 15 per cent. respectively; examining a sample of these cases he estimated that alcohol was an important aetiological factor in no more than a quarter (59). East studied the place of alcohol as a precipitating factor among gynocidal murderers suffering from delusional states and concluded that ". . . perhaps the majority of delusions of this nature seen in the Criminal Courts are due to alcoholic insanity but clinical practice leaves little doubt that paranoid and other states of mental disorder may result in crime associated with delusions of this type" (60). Homicidal behaviour associated with ideas of infidelity is illustrated by Cases 71, 72 and 73 in this series. The psychopathology of such patients has been explored by Myer, Apfelberger and Sugar in their careful study of 14 mentally ill men guilty of gynocide (61) and also by Karpman from a psychoanalytical standpoint (62).

Crimes of violence committed by patients entertaining delusional ideas of infidelity raise the medico-legal problems implicit in the McNaughton Rules. The difficulty of assessing responsibility in individual patients was illustrated 100 years ago by the case of Victor George Townley, who confessed in 1863 to having murdered a young girl after learning of her intention to

marry another man and raised a storm of conflicting opinions at his trial (63). Former clinical fashion contributed to this legal dilemma, for morbidly jealous patients with little spread of their symptoms fell readily into one or other of the widely accepted groups of the monomanias which Esquirol had introduced in his system of classification. The diagnosis of monomania was closely linked with the notion of partial insanity, a concept which met with the approval of such authorities as Hack Tuke who claimed that "although it would be unsafe to employ it in a Court of Law, there are occasions on which a medical witness may truthfully contend for a partial insanity which allows of a patient exercising his judgment in some matters while admitting that there are others on which his opinion would be warped by his delusions" (64). Despite his qualifications Tuke's argument leads inevitably to the legal correlate of partial responsibility and it was rejected by Maudsley who made his point with a telling and relevant example: "if a so-called monomaniac has the delusion that his wife, whom he has hitherto loved and trusted entirely, is dishonouring or conspiring against him the existence of a delusion so foreign to the whole habit of his healthy thought and feeling marks a deeper and more general derangement of mind, and it is impossible to foresee the extent of its possible influence upon his conduct" (65). Maudsley's view has been upheld by subsequent medical and legal opinion. Partial responsibility is no longer acceptable as a medico-legal concept and Gruhle has developed Maudsley's argument to show why morbid jealousy cannot be taken to sustain it.

The assessment of responsibility for criminal behaviour motivated by abnormal emotional response which cannot be attributed to formal mental disease raises problems of a different order. Amorous jealousy constitutes a strong motive for the so-called crimes of passion so frequently that Claude assigned crimes of jealousy to a separate category in his classification of these offences (66). The legal approach to such offences differs widely from country to country and in large measure reflects public attitudes towards sexual behaviour and codes of morality. Until recently English law has made few concessions to human frailty in this sphere. Even in the face of clear evidence of adultery a fatal act of vengeance on the part of an affronted cuckold was accounted murder unless it could be established that the defendant witnessed the legitimate spouse *flagrante delicto* and took immediate action. In these circumstances, and in these circumstances only, provocation could be entered as a defence, and the crime reduced to manslaughter. This distinction becomes more comprehensible if it is viewed in the light of the canons of normal motivation and conduct which the lawyer applies to his own creation in the person of the "reasonable man" of common law. On the evidence of collective legal opinion one jurist has attempted to define some of the pertinent qualities which characterize this model citizen: ". . . he is not impotent and he is not normally drunk. He does not lose his self-control on hearing a mere confession of adultery, but he becomes unbalanced at the sight of adultery, provided, of course, that he is married to the adulteress. Furthermore, he remains in control of his emotions, notwithstanding the vilest forms of oral provocation, and finally, even if he loses control he is expected to resort to no more than reasonable measures of retaliation" (67).

The boundaries of reasonable conduct have been re-defined by the Homicide Act of 1957. Though English law refuses to recognize "uncontrollable impulse" as a defence, the jury's deliberations on diminished responsibility must now be concerned with what the Act refers to explicitly as "self-control". The members of the jury are in effect being asked to consider

whether the accused was unable to prevent himself from committing the act with which he is charged, a question which the Royal Commission on Capital Punishment recommended as an addendum to those which are demanded by the McNaughton Rules. By Part 1, Section 3 of the 1957 Act a case of murder in which the accused person has been provoked confronts the jury with the task of determining ". . . whether the provocation was sufficient to make a reasonable man do as he (the murderer) did" and for this purpose they must take into account ". . . everything both done and said according to the effect which in their opinion it would have on a reasonable man". At the present time it is difficult to disagree with Lord Justice Devlin that the problems arising in association with self-control and provocation must be approached empirically (68). In this context the trial of Ernest Fantle in 1958 is of great potential interest as the first reported case in which the defence of provocation was made under the 1957 Act. Gooderson has discussed the implications of the case, particularly as it may reflect ". . . a more liberal attitude to killers who have not unreasonably lost their self-control" though he has emphasized that public opinion and the law have yet to confirm this trend (69).

But the limits of reasonable conduct have still to be defined for the aberrant individuals whose defects of personality impair their judgment and self-control rather than their reason. The clinical histories of several patients in this series, e.g., Cases 19 and 74 demonstrate numerous morbid traits which may accompany a "hyperaesthetic" readiness to react in a jealous manner and lend force to de Greeff's statement that ". . . it is possible to explain all crimes of passion by jealousy and by vanity or by one of the major sins. The truth is that these sins only reach such proportions with psychopathic personalities" (70). This association assumes some practical significance, for although modern legal opinion accepts the need for reform of the criminal law in respect of psychopathic behaviour and precedent exists for a plea of diminished responsibility, the Report of the Royal Commission on the Law relating to Mental Illness and Mental Deficiency has made it clear that medical knowledge is regarded as insufficiently secure to guide the lawyer in his management of individuals who cannot be classified as either mentally ill or mentally deficient. At the present time the heightened emotional reactions and correspondingly diminished self-control of the morbidly jealous neurotic or personality deviant remain legally dubious motives for criminal behaviour.

Legal advice may be sought by the spouse of a morbidly jealous patient who is considering marital dissolution because of domestic difficulties. The law, as it is embodied in the Matrimonial Causes Act, is straightforward when the afflicted partner is demonstrably insane; in Case 19, for example, the patient's wife was able to obtain a nullity decree after a few months of married life as she had been unaware of her husband's condition at the time of marriage. In other cases where the patient's sanity is not in question the spouse who seeks advice is likely to be advised to take proceedings on the grounds of cruelty. If the respondent accepts responsibility for his or her behaviour he has to rebut the charge of cruelty on factual evidence since "motive" does not constitute an essential element of legal cruelty in English law (71); Cases 12, 75 and 76 illustrate the background to successful actions of this type taken because of morbidly jealous behaviour. If the respondent alleges that he was in effect insane at the time his actions were committed it is of some theoretical and practical importance that by a ruling of Lord Chief Justice Goddard both limbs of the McNaughton Rules must apply to a criminal offence if a plea of insanity is to be sustained (72). The concept of responsibility having been tr ansferred

from the criminal to the divorce courts in this way, the possibility of a respondent pleading diminished responsibility must be entertained in the future since the Homicide Act of 1957 has sanctioned this plea in criminal law.*

Management and Outcome

A brief mention of these topics is justified by their clinical importance. In the opinion of one Victorian physician the most effective treatment of morbid jealousy was "geographical rather than medical" (73). Nowadays we can recognize that morbid jealousy accompanies several psychiatric states and that the value of symptomatic treatment depends partly on the nature of the associated illness, partly on the features of the individual case. The outcome and the indications for treatment depend therefore on a variety of factors and therapy cannot be limited to any single method. Where the symptoms constitute one component of an affective illness, for example, they may be expected to abate if the condition responds to electrical convulsive therapy. In a setting of chronic alcoholism the delusions of infidelity will usually recede when the patient's addictive habits are brought under control. Schizophrenics can lose their morbid suspicions if the illness remits spontaneously or is treated successfully. On the other hand, the prognosis of symptoms which appear for the first time to usher in a senile illness must be guarded.

As the one measure which has some place in the treatment of every case psychotherapy will demand particular consideration. Explanation, reassurance, support and counselling are of particular benefit when the reaction is linked to a problematic life-situation and is not associated with a major disturbance of personality (Cases 77, 78, 79). Claims for successful psychotherapy can be sustained best by judicious selection from less severe cases of this type. The therapeutic value of the more radical methods of psychological treatment is dubious, however, especially when they are applied to the graver conditions, e.g., a ruminative or paranoid state (74). A paradigm of the psychotherapeutic approach in such cases may be found in the detailed report of Brunswick (75); whether the resolution of symptoms in this case can be ascribed to therapeutic intervention or to the natural course of the illness remains questionable in view of the marked fluctuations in duration and intensity of the symptoms. The same objection, which can be raised in most reports of this type, is reinforced by several cases in this series, e.g., Case 80.

The management of any case in which morbid jealousy is a prominent symptom imposes on the physician a double task. A medical opinion is clearly of most value when the inter-personal and social aspects of a case are as closely understood as the narrower issues of diagnosis and treatment. In particular, some understanding must be acquired of the character and likely reactions of the patient's marital partner who may also be in need of help and support. Without this knowledge the physician will be handicapped in the practical advice which he can provide about domiciliary management and, above all, about the desirability of a temporary or permanent separation which can so often bring about a subsidence of the turbulent emotions. These decisions can be ignored only at the risk of painful and even dangerous consequences and

* The Divorce Court has since ruled that the plea of diminished responsibility cannot be entertained in such cases (Eds.).

although effective treatment cannot always be instituted the mitigation of distress and suffering should be possible in most cases.

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Appendix: Case Histories

Case 1

Mrs. H.J.L., *aet.* 41, catering supervisor, was admitted to hospital on 5.4.55. She came from a middle-class, French background. Her mother was an energetic woman, subject to mood swings who had been a sporadically heavy drinker for many years. The patient was brought up in England from early childhood and was always regared as a healthy, active person. Her work record in the catering business had been excellent and her sociable disposition made her very popular in the trade. She had had an uneventful heterosexual life and had been married three times. The failure of her first two marriages was attributable to her marital partners principally. Her third marriage had taken place at the age of 30 and was apparently happy; she had three healthy children. Neither the patient nor the husband had been unfaithful. Apart from tuberculosis of the left knee at the age of 13 her physical health had been good.

Shortly after her third marriage the patient assumed a responsible position in the catering trade which brought her into closer contact with alcohol. She soon began to indulge in heavy bouts of drinking; at first she drank in company but later she took to drinking spirits alone. In the course of these bouts she accused her husband of infidelity but otherwise she stated invariably that her accusations were groundless and that she knew him to be devoted to her. At no time did she search for evidence or make specific accusations about his conduct. Eventually she sought the help of her general practitioner and was referred to hospital.

On examination she was in good physical health except for an ankylosed left knee. She was friendly and co-operative and showed no overt signs of psychiatric abnormality. She attributed the suspicions of her husband to excessive indulgence in alcohol, stating that drink "makes me have nasty thoughts". She was treated with antabuse and supportive psychotherapy. She was discharged on 30.4.55, vowing not to drink again.

Diagnosis: Alcoholic addiction.

Follow up: The patient remained abstinent for a few months but then relapsed. She then made a more determined effort to overcome her dependence on alcohol and joined Alcoholics Anonymous. Three years after her discharge she was seen as an out-patient: she had remained teetotal for several months; she was working well and living a more settled married life. This improvement has since been maintained.

Case 2

Mr. J.A., *aet.* 36, builder's labourer, was admitted to hospital on 24.10.56 from the out-patient department. He was an illegitimate child who had been adopted by a coal miner in the Midlands. His adoptive mother gave birth to three children after his adoption; she resented his presence in the house, discriminated against him and made his early life very unhappy. He was an average scholar but from his earliest years he had been unsure of himself, self-conscious and subject to fits of moodiness. Nevertheless he was a popular person with many superficial acquaintances who did not suspect his underlying insecurity. Shortly after leaving school he entered the army where his conduct was satisfactory for five years until his discharge on medical grounds after an injury to his right knee. His social history on discharge from the army was very poor and he was never able to settle in any one job for more than a few months. Most of his difficulties at work arose from his dissatisfaction with steady employment; he was never dismissed. He had been a heavy drinker for many years (see below). The patient had been married for eight years after a fairly active pre-marital sexual life.

Shortly after meeting his wife the patient had become excessively jealous. During their engagement he had found her drunk with a married man and had never ceased to refer to this incident; in his own words—"From that day onwards I have been thinking, thinking, thinking. I felt as if something went out of me. I still love her but I can't trust her." From this time on the patient's life became dominated by his uncertainty about his wife's conduct. He began to drink heavily; he left many jobs because he felt that he was unable to concentrate and he became very irritable. He drank cider principally and frequented public houses in the district. Gradually his drinking became increasingly heavy and he incurred financial debts. A year before admission his wife took out a separation order against him; she also approached a marriage guidance counsellor who tried to help the patient by introducing him to the Church of England Temperance Society. He had been fined for drunkenness on several occasions and from time to time he had become aggressive to other people whom he suspected of having referred to him in uncomplimentary terms. His admission to hospital was precipitated by a suicidal attempt following the mistaken belief that his wife had deserted him.

On examination in hospital the patient was at first miserable, anxious and tremulous. Physically he had a coarse tremor of his face and hands and there were some moist râles in his chest. He appeared frightened and distressed and stated that he was sure that he could hear his name mentioned by other people in the ward. He stated also that he felt inferior to everyone else because of his illegitimate birth. He admitted to seeing fiery darts flying towards his eyes in the dark when he had been drinking very heavily. He stated spontaneously that his ideas about his wife's infidelity were irrational but insistent and that his life had become centred on his attempts to escape from them. His intelligence quotient was 86.

The patient was treated with antabuse and was given distributive psychotherapy. He also received orthopaedic attention for an ulnar nerve lesion. His wife was an attractive girl who stated that she was devoted to her husband but felt that nothing could change his point of view. During his stay in hospital the patient gradually improved and he was discharged on 22.2.57 to take a training course in carpentry at an industrial rehabilitation centre. At this time he was cheerful and confident of his ability to abstain from alcohol.

Diagnosis: Alcohol addiction.

Follow up: Following his discharge the patient's condition deteriorated within a few weeks. His alcohol consumption increased and his behaviour at home so terrified his wife that she sought medical advice in order to persuade him to accept treatment. He was admitted to a mental hospital on two occasions during the first two years after his discharge but he stayed only a short time. Eventually he was admitted to an observation unit in the autumn of 1959 and his wife left him during this period.

During his first few days in hospital he was tremulous, auditorily hallucinated and very depressed. He stated that if only he could overcome his morbid ideas about his wife's infidelity he would be able to stop drinking and resume work. He was transferred to a mental hospital for further treatment.

Case 3

Mr. W.S., *aet.* 45, accountant, was admitted to hospital on 28.8.50. He came from a middle-class background, the fourth of six siblings. There was a family history of alcoholism and personality deviation among his maternal and paternal relations. His childhood was most unhappy and though he had developed an outwardly sociable personality he was always a nervous, unstable individual who, in spite of being intelligent, changed his work frequently. He had been a heavy drinker from his early twenties and had indulged in numerous affairs since the age of 18. He had displayed excessive jealousy whenever his feelings were aroused. At the age of 34 he married an older woman who had responded to his advertisement for a wife in the daily press; she was a prim-minded, religious woman with a strict moral code which made her disapprove of her husband's promiscuous tendencies; there had been one stillborn child. The patient was often unfaithful to his wife. He had suffered no previous physical illness of note.

Soon after his marriage the patient became jealous and began to entertain suspicions of his wife's conduct; he often accused her of infidelity and began to drink heavily. After a drinking bout he would become contrite and admit that he had no proof of his wife's misconduct; he never tried to obtain any evidence or to make specific accusations. The episodes were related to his own extra marital affaires and both the patient and his wife recognized that his guilty feelings contributed to their genesis. Eventually his drinking began to impair his efficiency at work and he entered hospital for treatment.

In hospital he settled down quickly and displayed no overt psychiatric abnormality. He was treated with antabuse and psychotherapy and became an enthusiastic member of Alcoholics Anonymous. He decided that he was confident of his ability to give up drink and at the same time he decided to separate from his wife. He was discharged on 14.10.50.

Diagnosis: Alcoholic addiction in an abnormal personality.

Follow up: The patient was seen five months after discharge from hospital and had remained abstinent. He had no further feelings of jealousy and he stated that this was due to his separation from his wife. It was not possible to follow him up further.

Case 4

Mr. W.J.S., *aet.* 48, press operator, was admitted to a metropolitan observation unit on 2.7.56. He came from a working-class background, the youngest of ten children. There was no family history of nervous or mental illness. As far as could be ascertained his early development had been substantially normal. His work record was good. The patient had been a heavy drinker for many years though at first his drinking was confined to week-ends. He was usually bad-tempered in his cups and occasionally violent; in recent years the police had been called in when he had been particularly difficult but he would usually become more tractable at the end of a bout. He had been married for 27 years and the marriage had been satisfactory during the early years; there were six children whose ages ranged between 12 and 25. He had always been a jealous person and his wife had taken care never to give him an opportunity of accusing her of misconduct. Neither spouse had been unfaithful. In his medical history he had undergone a nephrectomy for a tuberculous kidney in 1939 but his general health had been adequate since that time.

About two years before admission to hospital his wife had begun to complain of menopausal symptoms and her sexual desires, which hitherto had remained strong, began to wane. The patient felt almost at once that this was in some way an affront to him and he began to accuse his wife of obtaining satisfaction elsewhere; at the same time he became even more demanding himself. Over the months he became increasingly suspicious and refused to allow his wife to leave the house unaccompanied. He began to examine her clothes and letters and to behave suspiciously towards his two oldest daughters who became frightened of him. From time to time he mentioned to his wife the possibility of his being poisoned by her. He became

much more irritable and difficult to live with and it was necessary to seek the advice of the probation officer when he had been drinking; on these occasions he would become violent and abusive. On the day of admission he had been drinking heavily and following a particularly unpleasant scene at home he was seen by his general practitioner after the police had been called in; it was agreed that his behaviour was due to a mental abnormality.

Within a few hours of admission to hospital the effects of the alcohol had worn off and on examination he appeared to be co-operative and friendly. He confined his accusatory remarks about his wife to a series of petty, domestic grievances and made no spontaneous reference to infidelity; he admitted that there had been quarrels at home but dismissed them as trivial and unimportant; he stated that his wife had always wanted to dominate the home. When questioned directly he admitted to previous accusations of infidelity but attributed these to "spite"; he stated that he never really believed the accusations although in the heat of the moment he admitted that he might have gone too far. He claimed that all his suspicions dated from his wife's waning interest in sexual relations and that between bouts of drinking he knew that his ideas were unfounded. He felt that it was necessary for him to cease accusing her and to return home. After discussion with the wife the patient left hospital to return home on 13.7.56.

Diagnosis: Alcoholism in an abnormal personality.

Follow up: It was not possible to obtain further information about this patient.

Case 5

Mr. J.A.J., *aet.* 57, ship's steward, was admitted to hospital from an observation unit on 9.7.58. He came from a working-class background, the youngest of four siblings. His father died within a few months of his birth and his mother remarried when he was aged 14; there were three step-siblings. His early life was often marked by periods of poverty and unhappiness at home but his development and school record were normal. After a few unskilled jobs he joined the regular army for six years, reaching the rank of corporal. He was a charge hand at the Admiralty for twenty-one years and gained the British Empire Medal; he was also active in union affairs for many years. During the twelve years before his admission he had held one job as a shipping clerk and was well thought of at work. All his adult life he had been known as an energetic, hard-working, seemingly cheerful man with many acquaintances but no friends; he was sensitive and spoke little about his personal affairs to anyone; he was aggressive, quick tempered and jealous. During the second world war he began to drink beer and since then he had drunk eight to ten pints weekly on an average; most of his drinking was in the company of other people. He had married at the age of 32 after an engagement lasting five years; he had led an irregular sexual life previously but had remained faithful to his wife throughout their marriage. His wife was a dependent person who had never been interested in other men. There were five children of the marriage ranging from 25 to 10 years of age. There was no previous history of serious physical disease or of nervous disorder.

During the whole of his married life the patient had been irrationally jealous; especially when intoxicated he would accuse his wife of infidelity and call her a prostitute though he would deny these accusations later. Such episodes were very rare at first but as he began to drink more during the war his accusations became more persistent and occasionally he would strike his wife, on two occasions necessitating her referral to hospital for minor surgery. During the five years before admission his morbid jealousy had become more intense; he became upset if his wife spoke to anyone, looked for stains on her clothing, examined her underclothes and occasionally tore up her dresses. He made frequent, increasingly absurd accusations of infidelity with most of the men in their neighbourhood but was usually contrite after his outbursts. In 1955 he left his wife, went to live in lodgings and began to drink more heavily than ever before. Nine months before admission he suddenly complained of hearing the voice of an unknown person speaking to him. At first he thought the voice belonged to a neighbour and he felt certain that a tape recording machine was being used in his room. He accused the neighbour of plotting against him; eventually he was driven to perpetrate an assault and received a warning from the police. He then developed a series of more fantastic ideas which centred on the belief that the recording apparatus had been introduced by the Ministry of Health with the connivance of the B.B.C. He came to believe that a machine was recording his every thought and he also experienced olfactory hallucinations, claiming that gas was being pumped into his room. Eventually he called in the police who arranged for his admission to an observation unit.

On examination in hospital he was a cheerful, lively, thick-set, little man who spoke willingly and spontaneously about himself. He was co-operative and helpful on the ward. He entertained delusions that unknown people had been trying to kill him by gas and were recording his thoughts. He admitted to continuous auditory hallucinations of male and female voices which discussed him in the third person, making both complimentary and insulting remarks. He was of above average intelligence and there was no evidence of cognitive disturbance on formal testing. A diagnosis of alcoholic hallucinosis was made and with treatment in hospital his hallucinations began to recede. After three months he began to contemplate leaving hospital and he attended the meetings organized by Alcoholics Anonymous. He underwent an antabuse reaction and began working from hospital. Five months after

admission he began to complain again of auditory hallucinations and maintained that the machines were starting up again; there was no evidence that he had resumed drinking. He was treated by drugs for some weeks and the hallucinations gradually faded along with his belief in the machines. He was left with a confirmed belief in the reality of his past experiences and on his discharge on 28.7.59 he refused to admit that they could have been imaginary.

Diagnosis: Alcoholic hallucinosis.

Follow up: He was seen regularly in the out-patient department for several months after his discharge. He was working well, drinking moderately and denied a recurrence of his former delusions and hallucinations though he still expressed his belief in their former reality.

Case 6

Mr. A.J.M., *aet.* 33, chef, was admitted to an observation unit on 17.7.56. He came from a working-class background, the youngest of five surviving siblings. One sister was unsettled and suffered from mood swings but there was no other family history of nervous or mental illness. The patient had exhibited numerous neurotic traits since childhood; his school record was adequate, however, and his culinary ability had always succeeded in stabilizing his work record. He was a reserved person, easily led, generous at times. He had indulged in bouts of very heavy drinking since his teens and had been sexually promiscuous with males and females since the age of 14. He married *aet.* 20 a tolerant woman who was fond of him despite his history; she had previously given birth to an illegitimate child by another man. She had remained faithful to the patient since the marriage although he had been occasionally unfaithful to her. Their sexual relationship had been satisfactory; there were three children *aet.* 16, 13 and 11 years. The patient had contracted tuberculosis in his twenties but he had been treated successfully.

From the age of 21 the patient had been admitted to various mental hospitals, observation units and prison on at least twenty occasions. He was regarded as having become addicted to alcohol when he was *aet.* 21. From time to time he became depressed and made a number of suicidal attempts; he began to rely on barbiturates, paraldehyde and benzedrine in addition to alcohol. At the time of each admission he usually expressed a determination to overcome his weakness; his mental state by the time of discharge was generally regarded as normal though on two occasions ideas of reference had been noted. The label of "psychopathic personality" had been affixed to him since his early twenties. Two years before admission he had been hallucinated after taking large doses of benzedrine and there had been at least one episode of delirium tremens. Shortly before admission he had taken fifty tablets of benzedrine sulphate, twelve of sodium amytal and a quantity of promazine. He had been wandering about the streets for some hours; on his return home he complained about his being persecuted by strange men whom he said he saw in his house; he turned out cupboards to look for them.

On examination he stated that he suspected his wife of infidelity with the men in his house. He also had auditory hallucinations of his children's voices. His memory and other cognitive functions appeared intact. Within a few days he had come out of his psychotic state and it then emerged that his suspicions about his wife had begun during the previous year and coincided with his decision to rely on benzedrine sulphate as his principal stimulant. Close questioning failed to elicit evidence of his having been morbidly jealous while he had relied on alcohol. The patient admitted that in his morbid state he felt that men were going to his house for the purpose of having sexual relations with his wife, but he rarely accused her of this directly.

Diagnosis: Psychopathic personality with addiction to amephedrine.

Follow up: The patient was discharged home vowing to remain off drugs, but was soon re-admitted in a similar state to another hospital. Two years later he was seen in the same observation unit holding to a complex paranoid delusional system involving his wife and children. On this occasion his symptoms did not remit quickly in hospital and he was transferred to a mental hospital under certificate.

Case 7

Mrs. F.F., *aet.* 62, housewife, was seen as an out-patient on 13.9.55. She was a Spanish woman who had been in England for two years and spoke no English; she came from a working-class Spanish family with ho family history of mental illness. She had been a cheerful, hard-working, meticulous person, always suspicious of other people. She was a teetotaller. She had been married for forty years; there were no children because her husband had had an orchitis; the sexual relationship had been satisfactory; the patient had never been unfaithful but her husband had had occasional affaires. There was no previous physical illness of note and no history of mental disturbance.

Four months before the consultation the patient became very suspicious and jealous, accusing her husband of taking an interest in other women; her accusations were without foundation. After a long quiescence her sexual feelings returned and she complained that her husband had neglected her because of his interests outside the home. She stated that someone, probably her husband, had stolen her clothes to give to other people. She had become depressed, cried often, slept poorly and ate little. She had fallen on several occasions and hurt herself.

On examination she was tense and complained that she had been tricked to come to hospital where her husband wished to incarcerate her. She told the doctor that her husband was involved with a girl in his factory and that she had followed him to work where she had seen him making signs to this girl. Other people had led her to believe in the liaison by means of facial grimaces. She claimed that she had noticed signs in the house which indicated that another woman had been there but she was very vague about the nature of these signs. Though her education was primitive there was no evidence of any intellectual deterioration. Physically she was in good health.

Diagnosis: Paraphrenia.

Follow up: The patient was seen three years later in the out-patient department. Her condition at this time was unchanged.

Case 8

Mr. C.T., *aet.* 57, cook, was admitted to hospital on 13.7.59. He came from a middle-class, Jewish, Viennese background, the younger of two siblings. There was no family history of nervous or mental illness. He had always been a solitary person with few interests and little ambition; he was pessimistic in outlook, easily angered and always jealous of his wife. There was no history of alcoholism. The patient was compelled to leave Austria in 1939; he served in the Pioneer Corps during the second world war and had maintained a satisfactory work record since 1945. His first marriage in March, 1932 was dissolved by racial law. His second marriage in 1940 was to an English woman and was stormy at times because of his difficult nature; there was no history of infidelity by either partner; they had one child aged 9½. The patient had been free of serious illness in the past.

In May, 1958 the patient had begun to complain of fatigue and a severe morning cough. In August, 1958, he was admitted to a general hospital where a diagnosis of carcinoma of the bronchus was made. He was given deep X-ray treatment and remained apparently well for almost a year. In June, 1959 he was re-admitted to hospital for examination of a mass in the abdomen: a laparotomy revealed extensive secondary deposits. Two days after the operation he became depressed and when his wife visited him in hospital he accused her of misconduct with other men. From then on he was dominated by the idea that his wife was planning to get rid of him. He accused her repeatedly of promiscuous behaviour; on occasion he struck her and he also spoke aggressively to his daughter. In his calmer moments he admitted to the irrational nature of his ideas but from time to time he became dominated by their force and intensity.

On examination he was physically ill with evidence of secondary carcinomatosis. There was no evidence of involvement of the central nervous system. Mentally he was importunate, critical, irritable and mildly depressed. He maintained that his wife had planned to get him into hospital so that she could indulge in sexual misconduct with other men; he admitted that there was no proof of this behaviour, but that circumstantial evidence made it virtually certain. In the ward he was generally unco-operative. An electroencephalogram indicated an active left front temporal lesion. Within a few days the patient's physical condition declined rapidly and he died in hospital on 18.8.59.

Post-mortem revealed an oatcell carcinoma of the right lobe bronchus with secondary deposits in the lymph nodes and adrenal glands. There was one deposit in the dura mater overlying the lateral part of the left petrous bone. One large right frontal deposit involved most of the white matter of the temporal lobe, and another had invaded the left temporal lobe.

Case 9

Mrs. K.M., *aet.* 65, telephonist, was admitted to hospital from an observation ward on 16.12.58. She came from a middle-class background, the fourth of five siblings. There was no history of nervous or mental disease in the family. She spent her early years in India and enjoyed a happy childhood. She had always been a quiet, sensitive person with no evidence of abnormal behaviour or of morbid personality traits; she had, however, always been of a jealous disposition. Her work record was good and for the fifteen years preceding admission she had worked as a telephonist in a London club. There was no history of excessive alcohol consumption. She had been married in her twenties to a man who died shortly afterwards and by whom she had one son. For some years she had been cohabiting with a man friend; their relationship had always been a good one and there had been no serious difficulties between them. There was no history of previous mental disease or physical illness of any significance.

For five years before her admission the relationship between the patient and her cohabitee had deteriorated. The man's physical powers declined and the patient began to accuse him of transferring his interest to other women at work and elsewhere. She accused him more openly and more insistently until he rarely left the house without her. At the same time she began to complain of insomnia and shortly afterwards her memory began to fail. In the months immediately preceding admission the patient had become increasingly agitated. She accused her friend of having begun an affaire with her own sister with whom she quarrelled on this account. She became very restless at night. complaining of the noise in the house and wondering whether her neighbours had been transmitting messages to her in some way. Her memory declined sharply and she was forced to give up her job. She became more argumentative and maudlin, especially after drink. Admission to hospital was precipitated by an accident in the street when she knelt down and prayed in public and had to be removed by the police.

On examination in hospital she appeared to be well preserved physically. She was neat and tidy in her appearance. There was a cyst on the thyroid isthmus. No abnormality of the central nervous system was detected. Mentally she was for the most part quiet and co-operative. She entertained paranoid delusions concerning her sister's misconduct with her friend and discussion of this topic made her very agitated and liable to short-lived episodes of irritability and weeping. She was disorientated for time and place, with a marked memory loss for recent and remote events. She confabulated readily to fill in memory gaps. A number of special investigations were undertaken: the cerebral spinal fluid, skull X-ray and electroencephalogram showed no abnormality but an air encephalogram gave evidence of cortical atrophy. Psychological investigation defined the extent of her dysmnesia. It was not considered that she would be able to lead a useful life outside an institution and she was transferred to a mental hospital on 16.3.59.

Diagnosis: Organic dementia, probably due to Alzheimer's disease.

Follow up: She has remained in hospital with no substantial change in her condition. The diagnosis of Alzheimer's disease has been favoured by several other physicians.

Case 10

Mrs. V.S., *aet.* 49, housewife, was admitted to hospital on 2.7.54. She came from a working-class background. There was no family history of mental illness. She had been a quiet, timid person with few friends or interests. She was a teetotaller. She had been married happily at the age of 24; sexual relations were satisfactory and neither spouse had been unfaithful; there were three children. Her past medical history had been uneventful.

In 1948 she had begun to develop ideas that her husband was being unfaithful and the neighbours were saying unpleasant things about her. These ideas persisted, though she was not troubled very much by them. Examination at a general hospital showed that she was suffering from panhypopituitarism. Treatment with various endocrine preparations improved her physical state though her delusions persisted. She became depressed and received two courses of E.C.T. without benefit in a psychiatric hospital in 1950. She entered a mental hospital for a short time in 1952.

On admission she was depressed and stated that her husband had been deceiving her though she did not seem to be very distressed by this belief. There were signs of organic mental impairment. Many signs of pituitary insufficiency were present. Her mental condition fluctuated with her physical state. Eventually she went into pituitary-adrenal failure and died in coma despite energetic treatment on 10.8.54.

At post-mortem there was evidence of renal tubular necrosis, hypopituitarism, hypothyroidism and hypoadrenalism.

Diagnosis: Hypopituitarism; paranoid reaction.

Case 11

Mr. F.W.J.W., *aet.* 56, insurance clerk, was admitted to hospital on 4.7.58 from the out-patient department. He came from a working-class background, the eldest of three siblings; there was no history of nervous or mental illness in the family. His early development was uneventful. On leaving school at the age of 14 he went into the insurance business and held a job in one firm from that time onwards. He had always been a very quiet, reserved, sensitive man who was interested only in his family and in his work; he had not been jealous in the past; he drank alcohol very rarely. He married *aet.* 37 a woman 13 years younger than himself. The marriage was happy on the whole and neither partner had been unfaithful. There were two children *aet.* 17 and 14. Sexual intercourse between the patient and his wife had been infrequent owing to her dislike of physical relations. The patient had a medical history of neurological disorder. In 1928 he developed a right side cerebral abscess with meningitis following a mastoid infection. In 1942, 1951 and 1954 he had undergone three neurological episodes. On the first occasion he developed a left hemiparesis: a space-occupying lesion was suspected but not supported by investigations. In 1951 he lost the use of his right hand for about a month. In 1954 he suffered a spastic paraparesis with slurring of speech and was again investigated in hospital: on this occasion a diagnosis of disseminated sclerosis was made. He made a partial recovery but was unable to walk without a stick thenceforward.

When he came out of hospital in 1954 he appeared to have undergone a change in his personality. He found it increasingly difficult to cope with his work and the financial arrangements at home. He became irritable and would strike his wife, sometimes hurting her and even threatening her life. Eventually he was forced to give up work and his behaviour at home became still more aggressive. He entertained the belief that his wife was being unfaithful to him with a lodger; he had become impotent in the course of his illness but he insisted on masturbation by his wife, a practice which he would have formerly found repellent.

On physical examination in hospital he presented a slurring dysarthria, a spastic paraparesis, an intention tremor and a dysdiadochokinesis in the upper limbs. He was co-operative and euphoric much of the time. He did not give a clear history because of memory defects; quite simple tests were poorly performed. In hospital and away from his wife he admitted that there had been very little evidence to support his accusations of infidelity but that he could not prevent these ideas from coming into his mind. He recognized that they were alien to his personality. If he went out with his wife or even saw her for a short time the ideas would

return and on one week-end pass he attacked her savagely. It was felt that it would be wiser for him to go into hospital because of the danger to his family and on 12.9.58 he entered a mental hospital as a voluntary patient.

Diagnosis: Morbid jealousy with disseminated sclerosis and early dementia.

Case 12

Mr. J.D., *aet.* 52, stevedore, was admitted to an observation unit on 9.7.56. He came from a working-class background, the fifth of eight living siblings. There was no family history of nervous or mental illness. His early history was normal. He had been a hard-working, stable, energetic person, inclined to heavy social drinking. He was married happily at 29; there were six children ranging in age from 25 to 10, all of them healthy. Sexual relations had declined in the six months before admission but had previously been satisfactory. Though the patient had been occasionally unfaithful his wife had remained devoted to him.

At the age of 4 the patient was ill with chorea and shortly afterwards with a mastoiditis which was complicated by a suspected brain abscess. An EEG had revealed an abnormality in the right temporal lobe. He had suffered from epileptic attacks for at least ten years; these had consisted of grand mal fits preceded by an aura and easily precipitated by bouts of heavy drinking. After his fits he was frequently exhausted and at times disoriented; he had been admitted to a mental hospital on several occasions for this reason. During the post-ictal phases of the last three or four episodes the patient had expressed morbid ideas about his wife's misconduct though when he had emerged from this condition he had been apparently well and very contrite.

His admission to the observation unit had been necessitated by a violent outburst when he had destroyed the television set, stating that he saw his wife's lover as a vision on the screen. On admission he was very active and at times incoherent and irritable. He was excited and expressed some flight of ideas. He was fully orientated. His mood was depressed and he expressed a number of suspicions about his wife's behaviour, citing minor incidents which he had misinterpreted; he felt that his poor sexual performance might have been related to her misconduct. Two weeks later he had lost all his symptoms except for some irritability and was discharged home.

Diagnosis: Post-epileptic psychosis with temporal lobe epilepsy.

Follow up: The patient was known to have been admitted to hospital in a similar condition on at least three more occasions during the two years after his discharge. His mental state improved after a few days in hospital on each occasion.

Case 13

Mrs. V.D., *aet.* 25, housewife, was admitted to hospital from an observation unit on 28.7.53. She came from a working-class background; her father was said to have been a very jealous man; there was a history of social instability on the paternal side of the family but no clear evidence of mental disease. She was an only child. The patient had always been close to her own family with few friends; she was moody with occasional outbursts of unreasonable temper but not jealous or suspicious. She drank alcohol very occasionally. She married *aet.* 18; the marriage was happy for the first few years and there was no infidelity by either spouse; sexual relations were satisfactory but the patient remained infertile for four and a half years and attended a gynaecological clinic for cauterization of a cervical erosion. There was one child *aet.* 2 years. She had suffered no serious physical illnesses.

Two months after the birth pf her son, the patient began to accuse her husband of flirting with a colleague's wife; she quickly became intensely and consistently jealous and home life rapidly deteriorated. Six months before her admission to hospital she began to complain that she was sleeping too heavily because her husband was drugging her in order to let other women into the flat; she became auditorily hallucinated and misinterpreted trivial events; she also began to develop ideas of reference. When seen as an out-patient she was recommended in-patient treatment but refused. A week later she made a suicidal attempt by jumping out of a window and was admitted to a mental hospital where she was given E.C.T. without much benefit. The diagnosis was of schizophrenia with hysterical features. On leaving hospital she became much worse, neglecting her home to such a degree that her husband sought alternative accommodation for the child. She improved spontaneously after two months and then relapsed, showing little interest or concentration, neglecting her home and her husband. She began to grimace and wander in her speech so that she could not be kept at home and had to be admitted eventually to an observation unit.

On examination she was inaccessible to conversation and she exhibited catatonic features which did not respond to E.C.T. Intravenous sodium amytal induced a temporary remission in the course of which she spoke freely of her jealous ideas. She slowly improved in hospital but was still elusive in conversation and showed some grimacing and stereotyped movements. She discharged herself against medical advice on 17.9.53.

Diagnosis: Schizophrenia with paranoid and catatonic features.

Follow up: The patient returned home and for some months remained well and functioned efficiently. She gave birth to a healthy child one year after discharge and was unaffected by this event. Nine months later, in May, 1955, she became suddenly depressed and withdrawn

and began to neglect her housework; she began to quote the bible frequently. Shortly afterwards she was admitted to a mental hospital where she was given E.C.T. and sedatives. On her discharge seven weeks later she was considered to be displaying residual symptoms. Six months later she had to be re-admitted under certificate; at this time her talk was incoherent but she clung to several delusional ideas, among them that of her husband's infidelity. She was given a full course of deep insulin treatment (40 comas) and was discharged "cured" in March, 1956. Her illness had resulted in considerable domestic difficulties which her husband had borne with fortitude but in 1957 relations deteriorated again and the possibility of separation was discussed. Two years later the husband obtained a divorce on the grounds of cruelty. The patient, who had been living apart from her husband for some months, contested the petition; she displayed no gross evidence of mental abnormality but adhered to her belief in her husband's infidelity.

Case 14

Mr. W.W.T.R., *aet.* 35, spray painter, was admitted to hospital on 6.6.51. He came from an unhappy working-class background, the oldest of nine siblings. There was no family history of nervous or mental disease. He had been a solitary, quiet person with few friends or outside interests who had always felt inferior to other people. His work history and military record were good. He drank little alcohol. *Aet.* 25 he married a highly-strung woman who was said to have had an hysterical illness in her youth; she was socially superior to the patient; they had three children *aet.* 8, 6 and 18 months; sexual relations had been adequate until the onset of the illness; neither spouse had been unfaithful. The patient had suffered no previous illnesses of consequence.

Six months before admission the patient began to insist that his wife give up her job because of the immoral reputation of the factory in which she was working. There had been, in fact, some promiscuity among the employees in a previous job and the wife had always cultivated a provocative attitude in the past. Occasionally the patient had dropped comments about his dislike of the conditions in which his wife was working, but he had never accused her of infidelity before. His ideas spread rapidly and he complained of her conduct to relatives and to family acquaintances; his ideas were linked at first to his belief that his wife was humiliating him as a further proof of his inferiority to her; he maintained that his wife was poisoning him and when he developed a pain in his arm he accused her of having injected him with a hypnotic so that she could go out with other men. He also complained that his two oldest children were carrying messages to other men. He was very depressed at times during this period; his sexual demands on his wife increased at first but later diminished and he felt that his potency had suffered in some way.

On examination he was a quiet, co-operative man who admitted to a number of delusions about his wife's infidelity; these were associated with frankly paranoid ideas, e.g., that his wife was in league with other people who had been trying to harm him. He was of low average intelligence. There was no other evidence of psychiatric abnormality. After a few days in hospital the patient discharged himself against medical advice on 18.6.51 and was supported in this decision by his wife.

Diagnosis: Paranoid schizophrenia.

Follow up: During the seven years over which it has been possible to follow up the patient since his discharge from hospital his disability has run a fluctuating course. Shortly after leaving hospital he had to be admitted to an observation unit because of the exacerbation of his symptoms; he then entered a mental hospital as a voluntary patient but discharged himself after a month before treatment could be administered. For the next three years he remained out of hospital and at work. He suffered phases of depression when he entertained numerous ideas about his wife's misconduct, but there were also periods lasting several months when these symptoms were in abeyance. The marital relationship remained firm and another child was born during this time.

As soon as the wife decided to try and return to work in 1955, however, all his symptoms flared up again and after a violent outburst he was re-admitted to an observation unit and then made a series of regular attendances at an out-patient clinic. For a further year he remained out of hospital with supportive treatment, his symptoms waxing and waning in intensity. At times he referred to his suspicions as products of his imagination but at other times they appeared to be unshakably accepted. Eventually he became much worse and his conduct at home disturbed the children. Admission to a mental hospital was arranged in 1958 but he remained for only six weeks and then discharged himself against medical advice before his course of E.C.T. could be completed.

Case 15

Mr. B.H., *aet.* 30, hairdresser, was admitted to hospital on 20.1.54 following an emergency referral from a general hospital. He came from a middle-class background; his father was a violent man; two brothers were heavy drinkers but there was no family history of mental illness. He had been brought up by a housekeeper following his mother's death when he was *aet.* 3. In childhood he had been timid and easily hurt; he was enuretic until the age of 8; in adult life he had been hard working and sociable. After one or two jobs he was called up *aet.* 17 and married *aet.* 19. Three months later he was sent overseas on active service; shortly

afterwards he received bullet wounds in his hip and testicles and some months later operative castration became necessary. He subsequently became depressed and wanted to give his wife a divorce but she insisted on continuing with the marriage. He came under the care of an endocrinologist who treated him with six-monthly implants of testosterone; with this treatment he was able to have sexual relations with his wife.

The physical relationship became an issue of contention between the patient and his wife; he became depressed as the time for his implant drew near but afterwards he would demand excessive sexual relations which were often refused; they had adopted one child. From time to time he had consorted with prostitutes. During the four years before admission, especially when he was depressed, he had tended to drink excessively. During 1953 there had been a number of difficulties at work. The patient became more worried, drank more than usual, engaged in several extra-marital relationships and became depressed and self-reproachful. At this time he was asked to forego the testosterone implant in favour of a single injection of testosterone phenyl propionate; his sexual activity increased considerably and he demanded intercourse with his wife three times daily. He refused to allow her to go out shopping and on one occasion struck her.

On examination he stated that messages were being sent to him and that he suspected his wife of having had sexual relations with a lodger in the house. He believed that he was being influenced by radio and that a group of people were blackmailing him. He attached significance to everyday events and found special meanings in the behaviour of other people and in what he read. At times he was perplexed and demonstrated a wealth of delusional ideas and perceptions. His affect was thought to be inappropriate. He discharged himself from hospital against medical advice on 11.2.54.

Diagnosis: Paranoid schizophrenia.

Follow up: For some months he was followed up in the out-patient department; he retained his delusions and made heavy sexual demands on his wife. He was admitted to a mental hospital under certificate and given deep insulin treatment (16 comas). He responded well and was discharged on 22.12.55 though there were several residual schizophrenic symptoms; these did not, however, include ideas of infidelity. On 9.1.58 he was working and seemed to be well on superficial examination. He still admitted to feelings of passivity, ideas of telepathy and to auditory hallucinations when he was closely questioned.

Case 16

Mr. C.M.R., *aet.* 41, unemployed, was admitted to hospital on 10.5.52 after having seen a number of doctors. He was the only son of a well-to-do middle-class family. His father had been a banker and in his latter years had shown evidence of eccentricity and instability; four months after the patient's birth his mother had died and the father then married a woman by whom he had four more children, all of whom were in good mental health. There was no history of nervous or mental illness in the family. The patient had had an unhappy early childhood, moving around a great deal and never very close to his father or step-mother. He was enuretic until the age of 13. He did well at a small public school, then spent four years as a cadet for a commercial shipping company before joining the regular army. He served as a staff officer throughout World War II and after demobilization studied for the bar, to which he was called in 1948. He had had no real experience of legal practice and had been living on his private income for some years. The patient had never indulged excessively in alcohol. In his adult life he had been universally regarded as an eccentric, unstable, superficially jovial individual with many unusual ideas and very few friends. He was liable to mood swings and emotional instability. He was first married at the age of 30 to a woman from whom he was emotionally and physically soon estranged. Their relationship was strained throughout and the patient left her for his second wife in 1949. There were no children by either marriage.

The patient had suffered no serious physical illness. During the war he had been referred to a psychiatrist and admitted to a military hospital where a diagnosis of "anxiety state in a man of cyclothymic temperament" was made; at this time he complained about his first wife's deceitful behaviour and also of his feeling that rightful promotion had been denied him. He was discharged after a few weeks. In the opinion of another psychiatrist six months later he was temperamentally unwell enough to be recommended for down grading. None the less he reached the rank of acting major without further medical incidents.

Shortly after his second marriage the patient began to affirm his belief that his wife was deceiving him. He emphasized the need for his marriage to become a success but complained that it was becoming a stage of intrigues which involved many other people. On this basis he constructed a complex system of persecutory ideas which included plots by Nazis, Jews, anti-Semites and a small boy of a neighbouring flat whom he suspected of having entered his room to interfere with his papers. He began to accumulate a large list of papers which he kept filed in readiness to support his other allegations. His wife, a pleasant, sincere but immature young nurse, was puzzled, upset and hurt at the beginning; when it had first been pointed out to her that her husband was mentally unwell she was incredulous. The patient's behaviour became more bizarre and he attempted to found a club for middle-aged people; when this failed he maintained that he had been opposed by Jews and that his wife was probably in league with these people. On one occasion he had become excited and was arrested for creating a disturbance; on another occasion he rang up a friend to tell him that he was convinced that he

had seen his wife on a motor-cycle outside the house though she was in reality many miles away. He became convinced that a series of minor events and signs rendered his wife's guilt indisputable.

The following are extracts from letters which the patient wrote a few months before entering hospital:

"In 1949 I met the girl who is now my second wife. I fell in love with her immediately and I am quite satisfied that she was in love with me (but she is being influenced away from me by someone else). For the first time in my life I had received the affection and sexual gratification from a person whom I love very much and I thought loved me. Suddenly for some unknown reason my second wife (before we were married) ceased to enjoy the complete sexual gratification and other hints of behaviour on her part led me to believe that either she was not in love with me or that she was in love with me but was sorry about it. I could not understand it at all.

In April, 1951 it became increasingly clear to me that my wife not only declined to let me have a complete sexual gratification (evidenced not only by the unexplained absence of secretion) but again certain actions and references by her led me clearly to conclude that she was for some purpose known to herself having a complete relationship elsewhere. I also noticed that each time that this event happened my wife had a peculiar smell in her mouth and the secretion was present.

In August, 1951 I commenced a course of injections at a local Male Reference Clinic with a view to giving my wife a child. On the very week when it was time to take the final test prior to a course, I was given, unbeknown to me, some tablets which had the effect of temporarily making me impotent. This has had the effect of negativing any treatment to give my wife my child.

In my view too many people are trying to tell us how NOT to run our marriage, seemingly the object in view being to tell my wife that I only project unhappiness and life would be intolerable.

I formed the view that this view was being suggested to my wife within six months of my meeting her, because for those first few months my wife gave herself to me in complete sexual gratification and I did not realize that for the first time in my life I had found someone who was in love with me and I with her.

My wife has never had a secretion accompanied with a particular odour which was previously apparent about once every two weeks, and when it was quite clear that she was ready for coitus and an orgasm. For the past six months several little actions and statements by my wife have led me to believe that she has been seeking sexual satisfaction by extra-marital relationship, and these actions coupled with the continued absence of the secretion accompanied by that odour convinces me. I have informed my wife of these suspicions, she denies having ever had another man, yet she cannot explain away either the continued absence of this secretion or its presence on two occasions (once at the clinic) when complete sexual satisfaction did not follow. I formed the view that it was the after-result of a sexual union.

I have also been informed that I have a depraved mind. The thought that my wife has been perhaps having an affair with someone else has made me frustrated and denying me the affection and sexual satisfaction which is the "bed-rock" of any happy marriage has not made light my burden in view of my previous unhappy experiences. My wife also comes out with some nonsense that I want to be rejected. More theory."

On examination in hospital the patient was a thick-set, plethoric man with no evidence of physical abnormality. He was at first co-operative and appeared to be in a state of sustained euphoria though at times he stated that he felt depressed. When discussing his marital difficulties his customary pressure of talk became even more marked and he indulged in excited monologues accompanied by many dramatic gestures. He was quite convinced about his wife's misconduct along with a host of ancillary morbid ideas. There was no evidence of hallucinations. He was of above average intelligence.

The patient remained in hospital for about two weeks until 23.5.52 and was then discharged because it was felt that no treatment could be provided for him. It was not possible to discuss the marital situation with his wife while he was in hospital.

Diagnosis: Paranoid state in a psychopathic personality.

Follow up: After his discharge the patient remained convinced of his wife's infidelity and continued his efforts to try and obtain redress for his grievances. Between October, 1952 and May, 1954 he was certified as suffering from paranoid schizophrenia in a mental hospital. On his discharge he was convinced that he had been the victim of a subversive organization which had used hypnotism and thought control to render him unfit to take his place in society. In 1955 his wife instituted divorce proceedings against him on the grounds of cruelty.

Shortly afterwards he was admitted to hospital under certificate. Since this time his condition has deteriorated. Most of his paranoid ideas have lost their force and he is described as "an amenable but somewhat indolent inhabitant of an open ward".

Case 17

Mr. H.B.A., *aet.* 42, solicitor, was admitted to hospital on 14.6.54, after a private consultation. He was the only child of middle-class parents; there was no family history of nervous

or mental disease. His early development had been unremarkable; he was known as a hard-working, conscientious, competent, ambitious man of a suspicious nature but with many acquaintances. He was a moderately heavy beer drinker. He was married in 1940, *aet.* 28 after a few trivial pre-marital adventures; there were two children *aet.* 11 and 7. The marriage had been regarded as satisfactory until a few months before admission; sexual relations had been normal; though the patient had led a promiscuous life during his army service his wife had never been unfaithful. His medical history had been satisfactory.

Five months after his marriage the patient had been called up into the army; he then began to worry about his wife's conduct at home. He became so anxious about her that he went A.W.O.L. in order to re-assure himself; on his return he did not divulge the reason for his absence and was given a prison sentence. He rejoined his regiment but a year later he was admitted to an army hospital with a diagnosis of "fugue and hysterical amnesia"; again he did not reveal the nature of his suspicions. While in the Middle East he was often unfaithful, but he settled down to a respectable married life on demobilization and there was no other medical disability except for occasional dyspeptic symptoms.

Over a number of years the patient had passed through phases of suspicion about his wife. At one time he had believed that an unknown person was secretly helping him to obtain a good position, a person who might have had sexual relations with his wife and wished to make amends; he speculated about the legitimacy of his children, about whether his wife had been involved in a divorce case and whether she had been consorting with a man whom he knew professionally. Six months before his admission his suspicions had increased to the point of dominating all other interests. His work deteriorated and he sold his successful legal practice. He became convinced that his wife was a nymphomaniac and he constructed a complicated story designed to show that she had engaged in promiscuous sexual activities over many years. He came to believe that his wife was trying to poison him and he struck her on one or two occasions. He sought legal advice and was urged to see a physician.

On examination in hospital he appeared to be calm and rarely showed any distress. concentrating on the subject of his wife's misconduct. He admitted to the circumstantial nature of his "proofs" and agreed that he would never be able to satisfy a court of law. He spoke of the possibility of a whispering campaign against him but there were no other paranoid ideas in evidence. After nine days in hospital the patient took his own discharge on 23.6.54, stating that he had come in only to be re-assured of his own sanity and that he did not need any medical attention.

Diagnosis: Paranoid state.

Follow up: After some difficulties the patient's wife decided to leave him and he eventually accepted the situation following several unsuccessful attempts at reconciliation. He took lodgings and worked at a number of unskilled jobs. For the first two years after discharge much of his time was spent in elaborate efforts to obtain evidence of his wife's misconduct; he visited the least reputable quarters of the city in which she had lived and mixed with many undesirable characters in order to discover whether she had associated with them; at this time he went through a very dissolute period himself claiming that this was necessary in order to gain the confidence of the many prostitutes with whom he made contact. He was subject from time to time to bouts of depression and vomiting and sought medical advice on this account. He formed the opinion that his wife was not only a prostitute but also a drug addict and that she had been in the habit of exposing herself and of assaulting young boys. He maintained contact with the hospital for nearly three years; on one occasion he stated that he had never been jealous but that his only motive was to discover the truth. In 1956 his wife obtained a divorce and shortly afterwards he emigrated in order to start up as a lawyer in Australia. In the opinion of his wife's solicitor "the fact that the marriage had been dissolved has had a stabilizing effect".

Case 18

Mrs. G.G., *aet.* 46, housewife, was admitted to hospital on 18.2.54 after a private consultation. She came from a lower middle-class background; her father had been a heavy drinker but there was no family history of mental illness. The patient was the second of four siblings. She had been known as sociable, sensitive to criticism, hard working and efficient; she drank alcohol very occasionally. She had been married *aet.* 23; the marriage was seemingly satisfactory, there were two children *aet.* 20 and 16; no infidelity by either partner had occurred. There was no history of serious physical disease or mental illness.

About six months before admission to hospital the patient began to complain more vehemently about the sexual incompatibility between her husband and herself; she had been masturbating for some years. She began to accuse her husband of seeking satisfaction elsewhere and complained of his conduct to her general practitioner who was at first inclined to believe that her suspicions were well founded. A few weeks later, however, a domiciliary visit was paid by a local psychiatrist who expressed the opinion that she was mentally ill. She had become dominated by the idea of her husband's infidelity and was constantly demanding a confession from him. Eventually she left home to stay with a relative who persuaded her after several weeks to enter hospital. There had been no irregularity of menstruation.

On examination she was a pleasant, co-operative woman. The abnormalities of her mental state were related to the unshakable conviction of her husband's infidelity. She

supported her story with a host of trivial incidents and pseudo-memories, though none of these was in itself implausible. She was at all times anxious to demonstrate that she could prove her allegations and become agitated if her arguments were disputed. No associated paranoid delusions were elicited. After three months in hospital the patient stated that she was more reconciled to her situation and able to return home. After a stormy phase of disagreement with her husband she left hospital with him on 19.6.54, without insight into her ideas but prepared to continue married life.

Diagnosis: Paraphrenia.

Follow up: On leaving hospital the patient took a full-time job and continued to live with her husband though they slept apart. She participated regularly in Christian Science activities from which she claimed to derive much support. For two years she expressed her delusions freely to her medical advisors and to her husband at times; for a few weeks she also believed that her children were in some way involved in his activities and home life was then particularly unhappy. Between two and three years after discharge she appeared to have accepted a more satisfactory *modus vivendi* and her criticisms of her husband were confined to domestic fault-finding, with very infrequent references to his supposed misconduct. This improvement has since been maintained.

Case 19

Mrs. C.W.L., *aet.* 44, housewife, was admitted to hospital on 17.11.54, from the outpatient department. She came from a happy working-class background. One brother had developed a post-encephalitic paranoid illness in his forties. She had been known as a suspicious person with feelings of inferiority and a tendency towards solitude. She was efficient at work. She drank virtually no alcohol. She had been married *aet.* 27 to a respectable bank manager; there had been no pre-marital sexual relations. There was very little affection in the marriage though neither spouse had been unfaithful. The patient had always been frigid; there was one child *aet.* 15. Her previous health had been good except for an ill-defined nervous illness *aet.* 18.

During the five years before her admission the patient's married life had been deteriorating. Over this period a growing hostility towards her husband became apparent; she slept apart from him, picked on him incessantly, lost her temper frequently and became increasingly quarrelsome. In 1950 the husband consulted his solicitors and sent her a letter of warning; no further action was taken. The husband realized that she was mentally ill at that time and his opinion was reinforced by the increasingly abnormal nature of her thoughts and actions. She began to accuse him of infidelity and attached significance to the most trivial and most innocent actions; she developed the idea that her husband was suffering from a venereal disorder and she attempted to disinfect everything which he had touched in the house; her behaviour in public and towards her son became increasingly embarrassing. She declared her intention of ruining her husband because of her imagined grievances; she also stated on occasions that she had important family connections of which she preferred not to speak. Eventually she went to the police and then to a magistrate's court; from there she was advised to see a solicitor who at once referred her for a psychiatric opinion.

In hospital she repeated her accusations against her husband, most of the time without much feeling but sometimes in an obviously depressed manner. No hallucinations were elicited at any time. Her ward-behaviour was adequate. She was given E.C.T. on eight occasions without any change in her condition. Eventually she discharged herself from hospital against medical advice on 17.1.55.

Diagnosis: Paranoid state.

Follow up: She remained out of hospital in the same unhappy condition for one year. In January, 1956 she was admitted to an observation unit and then to a mental hospital under certificate. At the time her paranoid ideas were in evidence but she was also claiming a relationship with such important historical figures as Napoleon, Nelson and King George VI. She was treated in hospital with deep insulin (40 comas) and then with chlorpromazine. In July, 1956 she was, despite treatment, as ill as on admission, very hostile to her husband and bent on legal proceedings against him. A month later she suddenly improved without obvious cause, became reconciled to her husband and within four weeks was discharged as completely well. When seen two months later in November, 1956 she was living with her husband at home and was apparently asymptomatic; her husband expressed himself as being completely satisfied with her recovery. It was not possible to follow her up subsequently.

Case 20

Mr. F.K., *aet.* 25, telephone installer, was admitted to hospital on 6.9.54. He was an only child from a lower middle-class Jewish background; there was no family history of nervous or mental disease. He had always been a difficult person, suspicious, sensitive, tending to identify himself with minority groups, hard-working but with little sustained energy output; since childhood he had developed disabling somatic symptoms whenever he was worried. His work record was unsatisfactory. He drank very little alcohol. The patient had married two months before admission; he had known his wife for approximately eighteen months and their courtship had been stormy from the outset because of his suspicions of her. He had

had no pre-marital sexual relation ith his wife but he had consorted occasionally with prostitutes; the patient had not been unfaithful since marriage but he had masturbated frequently. He had not suffered any serious physical illness.

Morbid traits had been apparent in the patient's personality from an early age, e.g., he had accused his father of having tried to poison him when he was 14. The patient had been discharged from the R.A.F. *aet.* 20 with a diagnosis of "neurosis". A month afterwards he spent a few weeks in a mental hospital in Israel. On his return to England *aet.* 21 he had been violent to his father on several occasions and had been admitted to a mental hospital in England for two months with a diagnosis of "schizoid personality"; no special treatment was administered. A few months later he met his wife and almost at once began to entertain suspicions about her conduct and intentions; he misinterpreted small incidents, worried about stains on her clothes and implicated her in his delusional ideas concerning his father. He became engaged after some weeks but twice broke off the engagement because of his suspicions. At first these suspicions were episodic, but gradually became less mutable. He struck his fiancée on several occasions in an effort to extort a confession and he became very depressed, complaining of tormenting doubts which he could not resolve. Three months before his marriage he saw a psychiatrist who arranged admission to another mental hospital; for two months he was given intensive psychotherapy and his numerous paranoid ideas and delusions were discussed at length. He was discharged "improved" and the marriage took place some weeks later. Immediately after marriage, however, his morbid jealousy became more intense. On the honeymoon he accused his wife of seducing a child of 12 and her every action was interpreted as proof of nymphomaniacal tendencies. He became very depressed and sought psychiatric help on this account.

On examination he expressed delusional ideas about his wife's infidelity. He stated that during intercourse there was an unpleasant odour which he attributed to his wife's having been with other men. He spoke freely of his suspicions concerning his father and expressed many more general ideas of reference, particularly concerning his racial origin. He also admitted to compulsive ideas and to having attached special meanings to everyday objects and experiences. He stated that he was suffering from paranoia. In hospital he remained discontented and left on several occasions to return home in order to discover what his wife was doing. He became a little less depressed when away from her and was eventually discharged on 14.12.54 after having received some supportive therapy.

Diagnosis: Paranoid personality.

Follow up: Within a few weeks of his leaving hospital the patient's wife left him and obtained a legal separation on the grounds of cruelty; she then proceeded to petition for nullity of the marriage; this was granted some months later. The patient had been violent to her on several occasions and she had become convinced that his symptoms were due to a mental disturbance and had left him fearing for her life. The patient then ceased to entertain his suspicions and he began to suffer from bouts of severe depression; he took to going out with many other married women in order, as he admitted, to obtain revenge though when he was away from his wife he admitted that there was no evidence to support his allegations. He made a suicidal attempt and was admitted to a mental hospital where he remained for three months with no specific treatment. He remained out of hospital for the next four years though he retained his suspicions and delusional ideas about his father and complained constantly of fatigue and difficulty in breathing. His work record has been uninterrupted none the less.

Case 21

Mr. J.F.H., *aet.* 38, labourer, was admitted to hospital from an observation unit on 27.11.57. He was the younger of two siblings from a middle-class, comfortable background, with no family history of nervous or mental disease. He had always been a shy, serious person, dissatisfied with his milieu and disinterested in conventional society; there had been no overtly abnormal personality traits during childhood and adolescence. The patient did well at school and worked for a while in an insurance office and then as a surveyor's clerk. At the outbreak of war he registered as a conscientious objector and after having spent some time in prison he was released in order to undertake farm work. He then worked as a farm labourer for thirteen years in the west country and never displayed any wish to improve his position despite his superior education. During the three years before admission he had been working in London in a menial capacity. The patient had been a heavy drinker for a few months when he was under considerable emotional strain some years before admission. He was married at the age of 20 and had five children, *aet.* 18, 14, 11, 8, and 6 months. His wife was a dreamy, dependent woman and suffered from poor sight which increased her dependence on the patient. During his stay in the country the patient had contracted a short-lived homosexual relationship with his landlord and there was also some experience of bestiality; the marriage on the whole was regarded as satisfactory by both partners despite these lapses. There was no history of serious physical or mental illness in the past.

In 1952 the patient had begun to feel that he was no longer acceptable to his friends and neighbours because of his sexual irregularities. Although he moved house he began to feel that he was surrounded by hostile observers and slowly he became convinced that they were spying on him and were obtaining information about him from hidden microphones in his house. He became unsettled and berated the family in order to get away from his persecutors.

He then developed ideas that his children did not belong to him and that he had never been able to satisfy his wife's sexual demands. From this he reasoned that she must have'been unfaithful to him; he became increasingly convinced of this belief with which he confronted his wife frequently. Hitherto his wife had accepted his morbid ideas unquestioningly but she became very depressed at these accusations, especially as they continued after the birth of her fifth child. Eventually she threatened to commit suicide and she drew the attention of the mental health officer to her husband's mental state. Both marital partners were admitted to the observation unit at the same time and then transferred to a psychiatric hospital.

On examination the patient demonstrated no physical abnormalities. He was at first co-operative and friendly. The form of his talk was normal. He expressed systematized paranoid delusions with many ideas of reference and misinterpretations. There were no hallucinations; his memory and retention were normal and he was of high average intelligence. It was also apparent that he was depressed about his wife's supposed misconduct and after a few days in hospital he made a suicidal attempt. After treatment with E.C.T. his depression lifted and he began to hold less firmly to his belief in his wife's infidelity; he remained, however, convinced that he had been the victim of an organized plot as the only explanation of his morbid state of mind. Eventually he was discharged from hospital on 2.8.58, cheerful, but still entertaining morbid ideas about bodily dysfunction and ideas of reference.

Diagnosis: Paranoid schizophrenia.

Follow up: Two years after leaving hospital the patient was working well but had remained apart from his family. He had become convinced that his infirmities would impede a satisfactory reconciliation for some time.

Case 22

Mrs. A.H., *aet.* 40, housewife, was admitted to hospital from an observation unit on 6.10.53. Her parents were from the Italian working class; there was no family history of mental illness. She was known as friendly and kind-hearted with many friends, always inclined to be jealous and possessive but never thought to be abnormally so. She drank alcohol very occasionally. She was married happily at the age of 26, there was one child *aet.* 10; neither spouse had been unfaithful and sexual relations were satisfactory. Her physical health had always been good, but for several years she had been to her general practitioner for a variety of somatic complaints, e.g., "fibrositis" and "spastic colon". In 1948 she had been investigated by a neurologist for headaches and had been diagnosed as suffering from "migraine with psychogenic overlay".

Approximately one year before admission she had begun to worry about her husband's conduct and on one occasion accused him without justification of spending an evening with another woman. Gradually she developed an increasingly suspicious attitude towards him and began to believe that he was responsible for her physical symptoms. She stated that he was hypnotizing her and indulging in abnormal sexual behaviour with her. She attached significance to such trivial findings as a patch of powder on her husband's coat and some perspiration on his face; on one occasion she found a jar of vaseline in her son's room and was convinced that her husband had assaulted the boy. Her suspicions increased in intensity and two weeks before admission she left her husband and went to her parents' home. She succeeded in persuading them of the truth of her accusations; one of her brothers called in a police doctor from Scotland Yard who advised them to seek medical advice for the patient. They realized eventually that she was ill and she was taken to an observation unit.

In hospital her ward behaviour was normal. She discussed freely an elaborate series of details concerning her husband's misconduct which were closely associated with ideas of persecution, e.g., that he was a member of a drug ring and was poisoning her. There were no hallucinations. She discharged herself against medical advice on 18.10.53, stating that she was not ill and required no treatment.

Diagnosis: Paraphrenia.

Follow up: One month after discharge she was seen at an out-patient clinic. There was no change in her mental state. One year later her husband stated by letter that she was asymptomatic and doing part-time voluntary nursing as well as her housework. It has not proved possible to obtain information about her since this time.

Case 23

Mr. L.P., *aet.* 49, wholesale manufacturer, was admitted to hospital on 23.7.51, after a private consultation. He was a Russian Jew who came to England in 1920 after most of his family had been killed. The family had been comfortably situated; there was no history of hereditary nervous or mental disease. He had always been known as a quick-tempered, dogmatic and argumentative person with few friends and little interest in anything but his work; he was authoritative in the home, orthodox in his religious beliefs and liable to short-lived phases of depression. He had worked hard and successfully in the textile trade and had eventually come to own a wholesale business. He was teetotal in his habits. He had married his own step-sister at the age of 26 and the marriage had been satisfactory; there was no infidelity by either partner and sexual relations were adequate. There were two children

aet. 16 and 25; the older child had received psychotherapy for an anxiety-state which developed when he was 23. His previous health had been good.

In 1950 the patient began to accuse his wife of adultery with her former doctor. He justified his opinion by referring to her increasing interest in physical relations which, he said, must have reflected her experience elsewhere. He attempted to buttress his viewpoint by reference to many trivial incidents and events: footprints in the garden, pieces of cotton wool, restless movements. He followed his wife himself and employed a detective to watch her movements but the negative results of these investigations did not affect his beliefs. From time to time he made increasing sexual demands on his wife and when she refused he accused her of having been satisfied elsewhere. He repeatedly requested a confession. At times he appeared very depressed and would bewail his fate, always accusing his wife and never blaming himself. He was eventually persuaded to enter hospital with difficulty.

On examination he was a well-built man of pyknic physique, in good physical health. He was superficially pleasant and co-operative but became aggressive and agitated when discussing his delusions. He stated that his wife was more in need of medical attention than he and that his admission to hospital was making him the scapegoat. He also believed that in his absence she was continuing freely to indulge in her liaison. After a few days he refused to stay in hospital and discharged himself against medical advice on 1.8.51.

Diagnosis: Paranoid state.

Follow up: It was possible to follow up the patient for four years after he left hospital. During this time his clinical state remained virtually unchanged but because of the tolerance of his wife it was not necessary to re-admit him.

Case 24

Mr. S.C., *aet.* 34, clerk, was admitted to hospital on 4.8.50 after referral by his general practitioner. He came from a working-class background; his father suffered from depressive mood swings; his mother was said to have been "nervous"; the maternal grandfather committed suicide. He had been regarded as an easy-going, social, conscientious, well-liked man. At the age of 17 he had suddenly stolen some money and tramped about the country for two years, but his subsequent work record in the army and in civilian life had been exemplary. He was a moderate beer drinker. He had had occasional pre-marital heterosexual experiences. He had been happily married at the age of 28; sexual relations were satisfactory to both partners and there was no infidelity on either side; there were two children *aet.* 10½ years and 2 months. There was a history of asthma and eczema from childhood.

About three months before admission the patient had complained of epigastric discomfort and diarrhoea. About three weeks before admission he had suddenly accused his wife of having had sexual relations with the man in the downstairs flat. He complained of diarrhoea and abdominal pain at this time and a few days later he again accused his wife and slapped her face. For a few days he appeared to be quite normal and then he told his wife that he had obtained proof of her infidelity; he had seen her hanging up a sheet to dry which, he claimed, belonged to another man, though it was in fact a sheet from the bed of his own son. On this occasion he struck his wife with a piece of wood and forced a false confession from her; this prevented further violence and he went to the police maintaining that his wife was poisoning him. His general practitioner referred him to hospital.

In hospital he remained convinced that his wife was unfaithful, citing as evidence the sheet and a code which his wife was supposed to have used for the purpose of communication with her friend; he maintained that his wife was poisoning him and that certain conversations carried a special meaning for him. He was pre-occupied with a complex delusional system erected on these beliefs though at times he appeared to realize that he was mistaken. There was no evidence of hallucinations. After a few days his delusional ideas spread to include the nursing staff. He was regarded as potentially dangerous towards his wife and was transferred to another hospital for long-term care on 16.8.50.

Diagnosis: Paranoid state.

Follow up: He remained in hospital on a voluntary basis for only eight days and then took his own discharge. Four days later he was admitted to an observation unit whence he was transferred to another mental hospital. Here he was regarded as a paranoid schizophrenic and treated with 38 insulin comas; on 15.12.50 he discharged himself against advice and at this time his relationship with his wife was stated to have improved although he still retained his morbid ideas about her. A year later, in December, 1951, he was known to be working and was stated to be concealing his symptoms; his wife, however, had become unwell and attempts were being made to persuade her to accept psychiatric treatment. It was not possible to follow him up further.

Case 25

Mr. G.G., *aet.* 41, painter and decorator, was admitted to hospital on 22.7.54, from a metropolitan observation unit. He came from a working-class family, the fifth of seven children; two of his brothers were known to have been unstable but there was no history of mental illness in the family. His early years were uneventful and he held a number

of jobs before joining the army at the age of 20 in 1934. He remained a private for ten years in the army and spent several years abroad though he never saw active service; he was discharged on psychiatric grounds in 1955 (see below). On leaving the services he had trained as a painter and decorator; his work had been satisfactory. He was regarded as having been a friendly, cheerful person at work and a family-man at home. He had never been more than an occasional drinker except for a brief spell three years before admission to hospital. He married first in 1945; his wife was four years older than he. They quarrelled from the outset and within a few months he began associating with a married woman; his wife soon left him and he divorced her shortly afterwards on the grounds of desertion. He then lived with his mistress and eventually married her in 1952 after her own divorce had been granted. They had two children, *aet.* 7 and 4. Apart from a prolapsed intervertebral disc he had suffered no major illness in the past.

In 1944 he was discharged from the army after having made a homicidal attack on a sergeant with a revolver. He had been depressed for some weeks beforehand during which time he had entertained homicidal ideas. He was examined by a psychiatrist who found evidence of "delusions of a persecutory type" and regarded him as suffering from a paranoid state. He attended the out-patient department of a psychiatric hospital in 1949 complaining of an inability to settle down. Over the previous few months he had become increasingly unstable; he displayed outbursts of violence and found his work difficult. He was regarded as suffering from "an unresolved war neurosis" and received supportive out-patient treatment for several months.

In 1954 he began to suspect for the first time that his wife was being unfaithful to him. He became difficult in his conduct and struck his wife on several occasions. He was admitted to an observation unit twice; on the second occasion he had attacked his children as well as his wife. In hospital he was friendly and co-operative in the ward but remained convinced of his wife's infidelity and threatened to take violent action against her. He denied his beliefs to doctors but admitted them to other patients and to nurses. He also spoke of litigation. There was no evidence of thought disorder, of morbid affect or of perceptual anomalies. Shortly after his admission his wife decided to leave him and on hearing this news the patient discharged himself on 14.7.54 against medical advice.

Diagnosis: Paranoid state.

Follow up: The patient has been followed up for five years since his discharge. His immediate course of action was to conduct a campaign against his wife who had accused him of cruelty and had issued a summons for maintenance under a Separation Order. The patient in turn accused his wife of plotting against him and he tried to obtain custody of the children. He approached several social agents in order to try and obtain help, supporting his story of his wife's infidelity with a complicated set of circumstantial details. He became increasingly depressed at his failure to obtain a divorce and made a suicidal attempt which necessitated admission to hospital. Shortly afterwards, in 1957, he took up with another woman whom he left shortly after his divorce went through. At about this time he began to entertain suspicions about his workmates whom he accused of picking on him. He married his mistress at this time and then began to worry about the possibility of her having been involved in his occupational difficulties; he suspected her of having telephoned the foreman and of having entertained men in his absence. Within a few months the marital relationship deteriorated and conditions at home became so bad as to demand the attention of two social agencies. The patient became depressed again and in 1959 tried to take his life after a quarrel at home. His wife took out a Separation Order and she and the patient gradually drifted apart. She maintained throughout this period that the patient's persistent accusations of infidelity had sapped her resistance though she still expressed strong feelings for him.

Case 26

Mr. J.F.S., *aet.* 56, actor, was admitted to hospital on 20.3.50, from an observation unit. He came from a middle-class background, the youngest of four siblings. He had been regarded as a cheerful and easy-going person, histrionic, generous and sociable with occasional bouts of irritability. He had a good work record and had never been a heavy drinker. The patient's first marriage ended in divorce when he was *aet.* 36, his wife having left him for another man; there was one daughter by this marriage. His re-marriage five years later was to a woman twenty years younger than himself; the marriage was apparently successful; sexual relations were satisfactory and both partners were faithful; there were no children. The medical history was uneventful.

The patient had suffered three depressive illnesses in the past. The first occurred during World War I following a long period of exposure in the trenches and it necessitated admission to hospital. The second followed closely on his divorce when he was irritable, pessimistic and unable to sleep; he lost weight over a period of several months but he did not enter hospital. The third depressive illness, in 1949, began after a set-back at work with some consequent financial insecurity; he had been admitted to an observation unit and thence to a mental hospital where he stayed for ten weeks and received E.C.T.; he was discharged "recovered".

On his discharge from mental hospital in June, 1949 the patient had become more irritable and less confident at home. By the beginning of 1950 he was talking of the hopelessness of his prospects and he began to accuse his wife of wishing to leave him for another man; he

was suspicious about all telephone calls and refused to let her go out alone. He stated that she did not love him and was jealous if she appeared interested in any masculine activity The wife took these accusations badly and resented the patient's attitude; she insisted that he seek medical treatment and they consulted a general practitioner who was so convinced of the irrational nature of the patient's accusations that he arranged for his admission to an observation unit.

On examination in hospital the patient was anxious and frankly depressed in his demeanour and his attitude towards the future. He was convinced of his wife's wish to leave him and of her loss of affection for him; this pre-occupation was closely linked with his ideas of self-depreciation and was buttressed by numerous misinterpretations of her everyday actions. There were no associated delusional ideas or hallucinations. During his six weeks in hospital the patient made a spontaneous recovery; his depression lifted and he began to appreciate the irrational nature of his ideas about his wife. Social work was carried out in an attempt to help the wife appreciate the morbid quality of the patient's accusations; in the course of this social work some long standing marital problems were discussed. He was discharged on 6.5.60.

Diagnosis: Depressive reaction (recurrent).

Follow up: The patient needed no further medical care during the eight years in which it has been possible to follow him up.

Case 27

Mr. A.V., *aet.* 38, bronze tracer, was admitted to hospital from an observation ward on 11.12.52. He came from an Anglo-Italian working-class background; there was no family history of mental disease. He had been regarded as a popular, sociable, sympathetic man with many friends. He worked well and drank very little alcohol. His first wife died of heart disease when he was *aet.* 26. He re-married three years later; the marriage had been happy on the whole but his wife was of a vivacious temperament and had occasionally said that she would go off with another man in order to "stimulate" the patient; their sexual relationship was satisfactory and neither partner had been unfaithful; there were two children *aet.* 8 and 5.

The patient was known to have worried about his stomach since his 'teens and he had sought medical advice on several occasions. In 1941 when he was a gunner in the Royal Artillery he was admitted to a military psychiatric hospital a few months after the death of his first wife; he was discharged from the army on psychiatric grounds with a diagnosis of "hysteria" but he was noted to have been very depressed and pre-occupied with bodily symptoms.

In 1951 he complained to his general practitioner on one occasion about his wife's infidelity but he seemed more concerned about insomnia, anorexia and dyspepsia until two months before admission when he began to indulge in outbursts of agitation and to accuse his wife of misconduct. He made a homicidal attack on her and then ran out of the house in a fit of self-reproach to throw himself under an underground train, sustaining a severe fracture which required treatment in a general hospital. After three weeks in this hospital he discharged himself apparently well but soon became increasingly depressed and self-reproachful, stating that he wished to give himself up to the police.

On admission he was in a depressive stupor. After four applications of E.C.T. he recovered fully from the stuporose state; he professed partial amnesia for his recent illness though elements of suspicion and self-reproach were discernible. He discharged himself against medical advice on 13.1.53.

Diagnosis: Depressive reaction.

Follow up: Seen at a follow-up clinic three weeks after discharge he was found to be relapsing and was re-admitted to an observation unit whence he was transferred to a mental hospital under certificate. He was treated with E.C.T. and was discharged "recovered". Contact was lost with him afterwards.

Case 28

Mr. A.L., *aet.* 32, clerk, was admitted to hospital on 1.7.55. He came from a working-class background; one brother had been referred for psychiatric treatment (Case 78) but otherwise there was no history of nervous or mental disease in the family. He had been a serious, hard-working, sociable person and a practising active homosexual since adolescence. His work record was good. He drank alcohol occasionally. There was no history of serious illness.

The patient had always tried to resist what he regarded as unnatural tendencies and had sought psychiatric help twice in the past. With every attachment he would become morbidly jealous, becoming pre-occupied with the fear that his male friend might seek feminine company; while he provoked quarrels on this score he would suggest simultaneously that his partner associate with women. His jealous emotions were closely associated with his sexual feelings. Two years before admission he had formed a close attachment to a man whose sister became very fond of him; this relationship engendered a severe conflict as the patient began to believe that he might confirm his belief in his own heterosexuality by marrying the girl. His feelings of jealousy towards the man increased nevertheless and he became sufficiently depressed to ask for psychiatric advice. Early in 1955 he began regular psychotherapy in the course of which it

emerged that he had always feared the possibility of impotence in his heterosexual relationships. After three months' psychotherapy the patient attempted to give up his male partner in order to indulge in heterosexual relations but when they proved difficult his depression deepened; he worried about his potency and began to entertain morbid ideas about his person, e.g., that his hair was falling out and that he was ageing prematurely. Eventually he expressed suicidal thoughts and was admitted to hospital.

On examination he presented a picture of agitated depression with constant ruminations about his past. After ten weeks he was given three applications of E.C.T. and made a dramatic recovery. When discharged from hospital on 17.10.55 he was only mildly depressed and anxious about the future.

Diagnosis: Agitated depression in a homosexual.

Follow up: After leaving hospital the patient was seen regularly as an out-patient and quickly made a satisfactory social adjustment. He has remained asymptomatic, has worked well and settled down to married life four years after his discharge.

Case 29

Mr. J.A.S., *aet.* 52, plumber's mate, was admitted to hospital on 31.3.58, having been referred by his general practitioner. He came from a working-class background, the third of five siblings. The father had died in a mental hospital where he had been admitted suffering from a depressive illness; he had been a very heavy drinker all his life. There was no other history of mental illness in the family. The patient's early years were uneventful; his schooling was satisfactory and his work record in the building trade had been unexceptionable. He had never drunk much alcohol. He was known as a quiet, reserved, shy person with no hobbies or friends; his principal interests were in his home and his family. He was a perfectionist and a worrier but externally placid in his behaviour. He was married *aet.* 26 to a pleasant but rather ebullient woman who was the dominant partner. Their marriage had always been accounted happy but for 13 years they had not had sexual relations, ostensibly because of a fear of pregnancy on the wife's part. There were two children of the marriage a son *aet.* 26 and a daughter *aet.* 22. The patient was a devoted father and especially fond of his daughter. Neither the patient nor his wife had been unfaithful. The patient had suffered no previous mental or serious physical illness.

Following his daughter's marriage eight months before admission the patient had appeared depressed. Three months later, following some employment problems, he became steadily more depressed and began to complain of weakness and insomnia, anorexia and poor concentration; he took to sitting silent for hours, ruminating on events in his past life which led him to feel guilty and unworthy. He became irritable and suspicious. His wife was disconcerted by his conduct and felt very guilty about their inadequate sexual life; two months before his admission she contemplated resuming physical relations and bought some contraceptives. Unfortunately, as a result of a misunderstanding, the patient discovered the contraceptives in her handbag and in his depressed state at once jumped to the conclusion that she had been unfaithful to him. From that time he indulged in violent outbursts against her, accusing her of misconduct and attacking her on one occasion; he stated that she had removed decorations in order to facilitate the entry of her lovers through the window and expressed other fantastic beliefs in a similar vein. These ideas were expounded only to his wife and never in the presence of other people. Between times he became still more depressed and his wife eventually persuaded him to seek medical advice.

On admission to hospital there was very little abnormal to detect. He was in good physical condition. He was co-operative and friendly throughout his stay. He was not a talkative man but he did not appear to be depressed and he denied entertaining delusions concerning his wife's fidelity; he admitted to having been jealous in the past but he attributed his reactions to imagination, claiming that he believed in his wife whom he had always loved. He stated that his symptoms had resulted from his fear of old age and from feelings of remorse at his not having displayed his affection to his wife sufficiently. He remained in hospital for five weeks and during this time he appeared to have full insight into his situation. His wife remained somewhat apprehensive, however, and on one of his week-ends out of hospital there was a domestic tiff which was relieved only by the intervention of the psychiatric social worker. He was discharged home on 26.4.58.

Diagnosis: Recovering reactive depression in the involutional period.

Follow up: The patient resumed work on his discharge and appeared to be perfectly well. On 6.5.58 his wife returned home in the evening to find that he had committed suicide by gassing.

Case 30

Mrs. M.M.C., *aet.* 46, housewife, was admitted from the out-patient department to which she had been referred by a marriage guidance clinic on 8.10.57. She came from a declining middle-class background, the youngest of three siblings; there was no family history of nervous or mental illness. The patient had always been regarded by her family as a "problem child". She was unsure of herself though superficially friendly. She had suffered occasional outbursts of depression, on one occasion leading to a suicidal gesture in her early twenties; she was

excessively dependent on other people but never jealous or suspicious; she had held a prudish attitude towards sexual matters. She had worked as a model until her marriage and had been a satisfactory housewife since. She was teetotal. She had been married *aet.* 25; the marriage was satisfactory on the whole to both partners but the patient never derived satisfaction from sexual relations; there had been two children of the marriage, one *aet.* 11, the other dying a few hours after birth; there had been no infidelity on the part of either spouse although the husband had been physically attracted to another woman in 1950. From the age of 40 menstruation had been irregular and pre-menstrual tension had been marked.

Eighteen months before admission to hospital the patient underwent a seeming change in her personality and in her attitude towards her husband. She became very passionate in her physical demands and took an active pleasure in sexual relations for the first time; a rejuvenation of her physical appearance was also noted. At the same time she began to exhibit excessively jealous feelings towards her husband, accusing him of an interest in other women. She also complained of tiredness, loss of energy, depression and insomnia and she began to lose weight. On this account she was admitted to a general hospital and fully investigated; no organic illness was discovered and Addison's disease was excluded; psychiatric help was advised but was refused. During the subsequent months she became more jealous and more depressed until the marital relationship deteriorated so far as to lead to a consultation at a marriage guidance clinic; a number of social problems had arisen during her illness of which the patient was unaware.

On examination in hospital the patient presented a picture of depression with agitation; she was thin and looked physically ill; her mental state was dominated by the thought of her husband's possible infidelity which, she stated, had occupied most of her waking thoughts for many months. These thoughts were aroused if his interest were directed towards any other woman, e.g., on television. The patient stated that only a month before admission she had been convinced of her husband's infidelity and had frequently accused him of misconduct but that she had begun to wonder whether her suspicions might be unreasonable. At no time had she believed in, or looked for, supporting evidence and there were no associated morbid ideas. Shortly after admission the patient contracted an influenzal illness which was complicated by a left lower lobe pneumonia. After recovery from this illness she felt much better; supportive discussions were commenced and gynaecological investigation revealed no abnormality. The patient slowly became less pre-occupied with her husband's conduct and began to worry about the family difficulties which she attributed to her own behaviour. She became importunate in her demands to leave hospital so that she could help her husband to reconstruct their affairs. She was discharged on 20.11.57.

Diagnosis: Agitated depression at the menopause.

Follow up: For several months after her discharge the patient struggled with an increasingly difficult series of social problems; she had fluctuating periods of anxiety and depression and required sedatives and hypnotics. Though she had lost her jealous feelings she became pre-occupied with her responsibility for the family difficulties and her dependence on her husband became more apparent. After six months she was frankly depressed; she was given a course of out-patient E.C.T. which resulted in a marked improvement.

Case 31

Mr. W.J.Y., *aet.* 49, counter salesman, was admitted to hospital on 12.4.55. He came from a working-class background, the eldest of five siblings, There was no history of mental or nervous illness in the family. He had been a stable, hard-working, conscientious person, cheerful, but always tending to worry, particularly about his health. His work record was adequate. He was a teetotaller. The patient had been married twice. Both marriages were happy. The first was to a woman who died of cancer at the age of 42; there were two children by this marriage. His second marriage took place in 1949 to a woman *aet.* 47; sexual relations were satisfactory and neither partner had been unfaithful. The patient's health had been good.

In 1950, six months after his second marriage, he began to worry about the possibility of a recurrence of a benign neoplasm which had been removed some six weeks before. He was reassured at a psychiatric out-patient department and remained well for two and a half years. He then began to worry about venous varicosities and a hernia; hypochondriacal pre-occupations came to dominate his life and he became increasingly depressed. His wife found life with him very difficult and left him for a short period. He became unable to continue his routine tasks and had to be admitted to hospital.

On admission to hospital he was distressed, hypochondriacal, agitated and constantly seeking reassurance. He presented ill-formulated ideas of guilt and unworthiness. After four weeks without specific treatment he made an almost complete recovery and was discharged on 21.5.55 though he remained over-concerned about his health.

Diagnosis: Depressive illness with hypochondriasis.

Follow up: Two weeks after his discharge he was admitted to an observation unit following a sudden attack on his wife and son. In the course of a few hours he had become agitated and had followed his wife about the house; he accused her of misconduct with various men in the house and also of having an affaire with her step-son whom he struck with the blunt end of a

chopper. On admission to the observation unit he was found to be depressed and to be entertaining vague ideas of persecution but within twenty-four hours these had disappeared and he was again discharged after a few days without symptoms.

Three months later it was again necessary to admit him to hospital where he presented the same picture as on his first admission; a course of E.C.T. removed most of the depressive features except for a few residual hypochondriacal ideas and it was possible to discharge him after two months. For the ensuing three years he received no more medical care than that prescribed on an occasional visit to his general practitioner.

Case 32

Mr. F.W.D., *aet.* 35, instrument maker, was admitted to hospital on 6.12.57 from an observation unit. He came from a working-class background; his father was a heavy drinker; his mother had been mentally unstable all her life and spent her last five years in a mental hospital. The patient was the third of four siblings, one of whom drank excessively; several members of his mother's family suffered from mental illnesses. He had always been a shy and sensitive person with numerous neurotic traits in childhood; he was a day-dreamer with well-developed auditory and visual imagery, artistic, reserved, self-conscious and with a tendency to mood swings. His work record was adequate. He was a moderately heavy beer drinker. He had had no sexual relationships before his marriage *aet.* 24; sexual relations had been satisfactory on the whole despite his wife's relative frigidity; there were three children *aet.* 9, 8 and 4 years. The patient had had two extra-marital experiences with prostitutes but his wife had always been faithful. There was no history of serious physical illness but the patient had been treated in a neurosis centre for an anxiety state during his army service; he was morbidly jealous of his fiancée's conduct at the time, His medical history was uneventful.

During most of his married life the patient had been somewhat suspicious of his wife and had at times accused her of misconduct. Though he always attempted to fight against these suspicions he was not always successful and there were frequent quarrels on this account. He was invariably depressed and upset on these occasions. The year before admission his father died and the patient was very distressed by this event; he blamed himself because his father had been worrying about the patient's marital difficulties. During the year he had become jealous of people at work and had begun to think that the neighbours were plotting against him. He entertained ideas of reference and misinterpreted comments around him. He began to drink more than usual and became more miserable in his appearance; he became disinclined to leave home and just before admission would not leave the house, saying that he was hiding from the neighbours of whom he was frightened. He was eventually admitted to an observation unit.

On examination in hospital he was anxious, bewildered and restless; he expressed paranoid fears and also many self-deprecatory ideas. His suspicions concerning his wife's conduct did not trouble him after a few days in hospital but he was worried by auditory experiences which he always maintained to be imaginary. Throughout his stay in hospital the patient displayed considerable understanding of his condition and recognized that his jealousy was unfounded; his own view of its genesis was that he had been adversely affected by unhappy events in his childhood and he admitted that he had entertained homosexual tendencies which he had always fought. He settled down well in hospital with supportive therapy and he underwent an herniorraphy without any untoward reaction. At the time of his discharge on 1.2.58 he was regarded by his wife as having recovered though he still entertained ideas of reference and occasionally wondered whether he might be hearing his own thoughts. As his depression lifted he was able to contemplate a resumption of marital life with optimism.

Diagnosis: Depressive illness in a "sensitive" personality.

Follow up: The patient was seen regularly in a follow-up clinic after his discharge. His work capacity remained good. No further marital discord was reported after one year, though the patient's abnormal personality traits were unchanged.

Case 33

Mr. J.S.B., *aet.* 40, professional musician, was admitted to hospital on 3.4.53 from the out-patient clinic. He came from a happy middle-class background, the youngest of three siblings; there was no family history of nervous or mental illness. The patient had always been sensitive, highly strung and very attached to his mother; he was known as a sociable, hard-working, conscientious man who was also fussy, petty, suspicious and ruminative. He was an excellent musician whose career had been dogged by misfortune. He drank alcohol very occasionally. The patient was married at the age of 34; he had had no previous sexual experience. His wife was socially inferior but good-hearted and very fond of him; there were no children, ostensibly because of financial difficulties. Sexual relations had been satisfactory, but the patient had always worried about these and had sought medical advice; despite minor difficulties the marriage was satisfactory to both partners until the onset of the illness; there had been no infidelity on the part of either spouse. The patient had suffered no serious previous illnesses.

Approximately one year before his admission and following an illness of his mother the patient began to be suspicious about his wife's conduct. He claimed that her manner towards him had changed and that as a result of his own incapacity she was indulging in a sexual

relationship with her driving instructor; he maintained he could detect evidence of her infidelity and that other events pointed in the same direction. At this time he became depressed and slept badly; on one or two occasions he left his wife to stay with friends or relatives because he found life at home intolerable. He also requested his solicitor to have his wife watched. He indulged in considerable self-reproach and said that his work was suffering, though his performance belied his judgment. He became very worried about the possibility of having telephone conversations intercepted in some way.

On examination he was depressed, self-reproachful and hopeless about the future. He was also perplexed and suspicious of his environment. He adduced numerous small pieces of "evidence" to prove that his wife had been unfaithful to him. Because of the depressive symptoms he was given E.C.T. and improved considerably. He remained a difficult patient, however, importunate and with occasional depressive phases when he was again suspicious of his surroundings and his wife's intentions. He became very concerned about the future of his marriage and his professional prospects but by the time of his discharge on 1.8.53 he had acquired some insight into his morbid ideas and was no more than reasonably anxious about the future.

Diagnosis: Depression with paranoid features.

Follow up: The patient has been followed up since his discharge by personal contact and by letter. During this time he was subject to periods of depression in which he became suspicious of his wife's conduct and raked up his old accusations. In January, 1959, he was re-admitted to hospital because of a recurrence of depressive symptoms. His depression lifted shortly after admission and a full discussion of his marital difficulties was undertaken with the patient and his wife; his suspicions of her were interpreted as projections of his own difficulties and the patient's wife appeared to accept this explanation. Between these depressive phases the patient has tended to dismiss his ideas as unimportant or to state that he has forgotten about them. Despite the obvious hostility between the patient and his wife they have not reached the point of separation, though from time to time this has been considered. The patient has continued to work effectively throughout this period.

Case 34

Mr. G.J.H., *aet.* 36, electrician, was admitted to hospital on 18.5.51 from an observation unit. He came from a working-class background, the younger of two siblings. His early years were disturbed by parental quarrels engendered by his father's jealous outbursts; his mother eventually left the home on this account; there was no family history of formal nervous or mental disease. He was a quiet, friendly and generous man, timid and always tending to be jealous of his wife. His work record was good. He drank very little alcohol. He had married happily at the age of 22. His wife was a quiet, sincere person who was very fond of the patient; neither partner had had pre-marital sexual experience; they had two children *aet.* 8 and 4; one abortion had been induced by the wife against the patient's wishes; sexual relations had been very satisfactory and neither spouse had been unfaithful. The patient had suffered no serious physical illness.

The first symptoms of the patient's illness had appeared six months before admission to hospital. In the course of a few days he developed ideas concerning his wife's misconduct and he accused her in public of having flirted with her brother-in-law. At the same time he developed a number of somatic symptoms—stuffiness in the nose, pains in the back and unsteadiness of the legs—and he began to complain of the peculiar taste of his food in which he suspected poison had been placed. From time to time he became very depressed and begged his wife's forgiveness but his symptoms gradually became more troublesome and he began to watch the children to see whether they were bringing his wife messages from an unknown man. His admission to an observation unit was precipitated by a demonstrative assault on his wife whom he threatened with violence unless she told him the truth; this episode was followed by much remorse and the patient himself requested that a doctor be summoned.

On examination in hospital he was a co-operative, solitary man who appeared to be depressed much of the time but still held to numerous delusional ideas concerning his wife's infidelity. He also ruminated on the possibility of a plot against his life in which his wife and relations were involved. There was no evidence of perceptual anomalies. The patient was of average intelligence. He was offered treatment but during his stay he became suspicious of the other patients and of the food which he was being given; on 31.5.51 he took his discharge against medical advice before treatment could be initiated.

Diagnosis: Paranoid schizophrenia.

Follow up: On returning home the patient continued to accuse his wife of misconduct and of trying to poison his food. The marital relationship quickly deteriorated and after one year the patient's wife left him to live with her mother. He had begun to search the flat for poison and on one occasion had accused her of hiding poison in the vagina and had insisted that she taste the food in order to feel its effects. He was at first subject to moods of depression but his behaviour was socially acceptable and he settled down to work well without requiring medical help. Eventually, however, he complained of an inability to concentrate or think clearly. Six years after his discharge from hospital he was admitted to a mental hospital; there his conversation was circumstantial and his behaviour apathetic and withdrawn. He was treated with E.C.T. on nine occasions and improved considerably. He discharged himself from hospital against medical advice.

Case 35

Mr. K.P., *aet.* 37, hairdresser, entered hospital on 21.10.58, following a suicidal attempt which had led to his being admitted to an observation unit a few days before. He came from a Greek Cypriot family, the youngest of five children. The father had been unfaithful to his wife on numerous occasions and three of his siblings were said to be very jealous; there was, however, no evidence of formal nervous or mental disease in the family. The patient's early life had been uneventful and he was regarded as a healthy, happy child. He first came to England at the age of 20 to join the R.A.F. On his discharge he stayed in this country as a barber; his work record had been extremely good. He was known as a quiet person and a poor mixer. He spent most of his free time at the dog races; he had always been very particular about his appearance, fussy about food, surly and suspicious; he preferred English to Greek friends. He had never drunk much alcohol. He married an English girl at the age of 22; the marriage had been happy enough at first and the wife was very fond of him. There was one child of the marriage *aet.* 13 who suffered from epilepsy. About two years before his admission to hospital, the patient confessed to an affaire; his wife, who had always been faithful, promptly forgave him. The patient had suffered from a number of febrile illnesses but there had been no serious physical disease. While in the Air Force he had been treated successfully for venereal disease in 1943. In 1944 he began to complain of headaches, sickness, depression and insomnia; he was regarded as suffering from an anxiety neurosis of some years standing and was invalided out on these grounds.

The precise date of onset of the illness was obscure but it seemed that about three years before he was admitted to hospital the patient had begun to spend much more time away from home, probably in the company of his mistress. About eighteen months before admission he had quite suddenly on one occasion accused his wife of being unfaithful to him and two months later he did so again when his mistress raised difficulties about the paternity of her child. One year before admission he began to complain of headaches, insomnia and lack of concentration and then began to lose interest in work and started to accuse his wife of infidelity with his customers. He became increasingly suspicious of his wife and stated that people were accusing her of being a prostitute. He was eventually persuaded to seek medical advice but after one out-patient appointment he became very agitated and tried to take his life by gassing.

On admission to hospital he was a physically healthy man who at first appeared to be very frightened. He complained of a patchy memory loss and persisted in his patently absurd accusations against his wife. He was very depressed and cried frequently. A course of E.C.T. was commenced with subsequent recession of his depressive symptoms. The patient's paranoid ideas, however, became more marked; in addition to the accusations against his wife he suspected the nursing staff and doctors of being in league with the police against him. He became agitated and depressed again and was treated with a further course of E.C.T.; he responded once more and lost his depressive symptoms. In the opinion of his wife he had then regained his pre-morbid state but it was apparent that he still entertained a number of suspicious ideas about her and while he remained under observation in hospital it was possible to obtain a clearer picture of his fundamentally suspicious and mistrustful outlook free of depression. During his stay in hospital he was seen by several different physicians who differed in their diagnostic assessment of the case: some regarded the patient as suffering from paranoid schizophrenia while others were more impressed by the affective elements he displayed. By the time of his discharge on 3.3.59 the patient had no depressive symptoms and spoke of his morbid ideas in the past. On the other hand, he admitted to a lingering suspicion of his wife though he felt sure that it was based on no reasonable grounds.

Diagnosis: Affective disorder with paranoid features.

Follow up: The patient was followed up on an out-patient basis for fifteen months. During this time his wife was also seen on several occasions by the psychiatric social worker. The patient had been able to return home and work regularly but from time to time he admitted to worrying about his wife's activities and she reported that her life at home was becoming increasingly difficult on this account. He told the doctor of occasional fears about people with malign intentions towards him but his mood remained cheerful and in spite of occasional bad days he admitted to no general paranoid ideas. The situation at home remained unchanged. It was felt that the key to the situation lay in the tolerance of the patient's wife to the home situation.

Case 36

Mr. A.E., *aet.* 56, painter and decorator, was admitted to hospital from an observation unit on 17.7.51. He came from a working-class background; his father was said to have been "strict and very jealous". The patient's step-mother was unfaithful and eventually deserted the father; there was a history of an unspecified mental illness of one paternal aunt. The patient had always been a jealous and domineering man, restless, quick-tempered, interested only in domestic matters and with few friends. He had had many occupations and had managed them all satisfactorily. He drank alcohol occasionally but never excessively. He had married *aet.* 19; the marriage was always considered happy though his wife had become apprehensive about sexual relations in view of her eight pregnancies; there were five living children, all well; there had been no infidelity by either partner. The patient's health had always been good but he had complained of "fibrositis" for many years.

Aet. 48 the patient began to complain that he suffered from a very offensive body odour and in consequence he withdrew still further from other people's society. He developed the idea that his workmates shunned him and he could not be reassured.

About nine months before admission the patient became overtly suspicious of his wife whom he accused of committing adultery with the milkman. He became pre-occupied with this belief, stating that his wife was cold to him during the days when he supposed the milkman to be off work, that she behaved in an abandoned manner and there was genital evidence of her excessive indulgence. These ideas rapidly spread and he accused his wife of trying to poison him and of setting the children against him. He became antagonistic towards one of his sons whom he struck on one occasion. His illness led to domestic disruption. He gave up work, claiming that it was necessary to watch his wife all the time; he sold the house and created considerable financial problems for the family. At times there were episodes of depression when he would weep, appear remorseful and talk of suicide. His wife became terrified of him and went to a probation officer to enquire about a Separation Order. He was advised to enter a mental hospital, but refused to do so and admission to an observation unit became necessary.

On examination in hospital the patient recounted his delusional ideas and the "evidence" for them: he retained his hypochondriacal fears. For most of the time he was equable but at times he was observed to be patently depressed. It was not thought probable that he would respond to physical treatment and eventually he was discharged to live with a relative. Though he appeared calm at the time of his discharge on 3.10.51 it was recognized that his ideas had not been modified.

Case 37

Mrs. J.T., *aet.* 25, housewife, was admitted to hospital on 29.2.60 after an out-patient consultation. She came from a middle-class French family, the youngest of three children. The father had been an ill-tempered, jealous man and the mother a hypochondriacal, erratic spendthrift. The patient's older sister had led an asocial existence for many years, living in the middle of a forest with a recluse by whom she had had ten children. There was no history of overt psychiatric illness in the family. Despite domestic tension the patient's childhood was a happy one and she did fairly well at school though she was always a lazy child. At the age of 18 she came to England and worked in a domestic capacity until she met her husband. She had always been regarded as shy, awkward and moody, with bouts of elation but no real self-confidence; suspicious of other people since childhood, she was jealous and possessive of everything and everyone with whom she came in contact; she had been unusually interested in sexual matters since the age of 5. She drank alcohol occasionally but not in excess. The patient married at the age of 23, when she was seven months pregnant; her husband was thirteen years older than she, a divorcé with one child; she had been living with him on and off for about three years before marriage and their courtship had been a very stormy one because of the ambiguous feelings he entertained towards both the patient and his first wife. The patient had lived with two or three other men during this period. They had one child who was two years of age. There had been no history of previous nervous or physical illness.

Shortly after meeting her husband the patient became very jealous of his first wife and her emotions came to constitute an integral part of her feelings for him. The jealousy was closely related to her mood and its expression appeared to follow a fairly regular pattern; after about two weeks of equability there would be a "crisis" with jealousy, arguments and accusations which lasted from two to three days; this would be followed by a short period of reconciliation in which the patient felt contrite and amorous; in the subsequent two or three weeks she would appear to be indifferent, apathetic and seemingly disinterested in her husband and home. At the height of her jealousy she would make fantastic accusations, search his clothes and take steps to try and trap him, e.g., on one occasion she took his shirt to a laboratory to see whether there was seminal fluid on it; during these periods she was convinced of her husband's infidelity though at other times she realized there was no substance to her beliefs. She admitted to experiencing a particular satisfaction from her jealousy.

On examination she was a tall, red-headed woman who was friendly and anxious to co-operate. She described her ideas clearly and was able to discuss them rationally. She appreciated that they were closely associated with feelings of insecurity which had constituted an aspect of her personality for as long as she could remember. There was no other evidence of psychiatric abnormality. Her intelligence quotient was 130. The patient left hospital on 30.6.60 in order to look after her child, stating that she felt much better after discussing her difficulties but could not tolerate being away from her husband.

Diagnosis: Psychopathic personality.

Follow up: She has been seen on one occasion in the out-patient department. The domestic situation was then unchanged.

Case 38

Mr. W.E.H., *aet.* 39, credit salesman, was admitted to hospital from the out-patient department on 12.11.58. He came from a working-class background. His father was a moody man who regarded himself as suffering from an inferiority complex which made him intolerant of other people; he was openly disdainful of the patient who suffered a great deal in consequence. His mother was a healthy, stern, tactless person who was never fond of the patient;

she had suffered from a nervous illness in her youth. The patient's two younger brothers were both nervous, shy, unhappy people. The patient had always felt that he was the outsider in his home. His early development was normal. During adolescence he developed a reputation for daring and fearless conduct which gave him the reputation of being a leader in many activities. He was regarded as over-confident, daring and energetic with an interest in numerous unrealistic schemes; he was a prominent mason who belonged to many clubs, followed sport and claimed many superficial friends. He served for six years in the R.A.F. and reached the rank of corporal. On his discharge he worked as an engineer, then as a credit salesman and did very well financially. He had indulged in alcohol occasionally and also took large quantities of amphetamine from time to time. At the age of 20 he married a girl who was the daughter of a prostitute. He was jealous of her and there were frequent arguments. They had one child aged 18. The marriage was happy enough at first even though after ten years the wife entered into an affaire with a married man for a short time. The patient forgave her after a stormy period and neither partner had been unfaithful since.

In 1951 the patient became short-tempered, irritable and demanding. He began to take dexedrine in order to restore his energy and then complained of insomnia. He also began to make excessive and perverse demands on his wife whom he accused of infidelity unjustifiably. In 1955 he began to drink heavily for the first time. While in his cups he complained of hearing voices and again accused his wife of infidelity. His suspicions of his wife's conduct became more persistent and in 1956 he was sent to see a psychiatrist who thought that the diagnosis lay between schizophrenia and a toxic psychosis. Admission to hospital was advised. The patient refused and confessed that he had been taking dexedrine in large quantities for many years without having admitted the fact. For the next two years the patient refrained from taking alcohol and drugs but he remained suspicious of his wife. In 1958 he began to suspect that his wife was taking drugs in order to give her energy for sexual indulgence with other men. He looked for evidence of this behaviour in trivial events and in their sexual relations; he became more demanding again and followed his wife everywhere, questioning her incessantly until arguments ensued. Three weeks before admission he told his wife that he saw "dirty pictures" in front of his eyes until he closed them. His concentration became poor and he developed insomnia. He wept at times over his wife's supposed infidelity but for the most part he was talkative and over-active. He stated that if he could prove that his wife had been taking tablets he would demonstrate thereby that his ideas were well-founded. He also complained that he could not prevent himself from behaving as he did. Despite his protestations, however, his conduct remained demanding and his wife was eventually compelled to bring him back to the out-patient department from where he was admitted.

On admission he was a thick-set, physically healthy man with a persuasive, ingratiating manner. He was hyper-active on the ward and interested in events around him. He talked quickly and discussed recent events in a somewhat circumstantial manner. He believed his wife to be unfaithful and to have been taking drugs in order to increase her sexual activities. He denied hallucinations and there was no evidence of cognitive disability. He was of average intelligence. Within a few days the patient denied his belief in his wife's infidelity and stated that he realized he had been in the wrong. None the less from time to time he referred to minor events which might have corroborated his suspicions. His mood remained variable in hospital; at times he was elated, at times quite depressed. He was treated with distributive psychotherapy in the course of which he admitted to feelings of inferiority, to sexual inadequacy and to feelings of aggression which he had been unable to ventilate. He was discharged on 12.12.58.

Diagnosis: Paranoid personality.

Follow up: He attended the out-patient department for psychotherapy for one year. During this time he worked regularly and did not have recourse to drugs or to alcohol. There was no disturbance of mood and his relationship with his wife remained adequate although occasionally he wondered whether or not there had been any basis to his suspicions. His wife was seen by the psychiatric social worker who discussed many of her difficulties with her.

Case 39

Mrs. I.P., *aet.* 44, housewife, was admitted to hospital on 10.3.56, from an observation unit. She was an only child of a working-class background; there was no family history of mental disease. She had been an energetic, sociable, usually cheerful person who had shown jealous traits at times. She drank very little alcohol. She had been happily married for twenty-four years and had three children; neither partner had been unfaithful and their sexual relations were satisfactory. The patient had undergone several gynaecological operations including an hysterectomy; Addison's disease was diagnosed in 1956 and she had been on continuous maintenance therapy since.

Fourteen months before admission the patient's husband had struck up a friendship with another woman and the marital relationship deteriorated from this time. The husband admitted that he was attracted to the other woman but denied anything more; the patient made a suicidal attempt nevertheless. They were advised to seek help from a marriage guidance council, but the husband rejected the suggestion. The patient became more depressed and three months before admission she was admitted to a general hospital where E.C.T. was administered. She improved a little after this treatment but required further admission to hospital because of her

Addison's disease. Following a bout of influenza she became depressed again and made another suicidal attempt. The marital relationship was patched up but she remained depressed and developed epigastric pain which was investigated radiologically. The patient began to spend more of her time watching her husband and the other woman; she became dominated by the idea that he was being unfaithful to her and at the same time she became increasingly depressed. She eventually made a serious suicidal attempt with sleeping tablets and was admitted to an observation unit.

On examination in hospital she was mildly depressed and agitated only when she described the recent course of her marriage. At other times there was no evidence of psychiatric disorder. She was discharged home asymptomatic after two months in hospital during which time she had received no treatment other than for her Addison's disease.

Diagnosis: Reactive depression.

Follow up: Six months later she was seen at the out-patients' department with her husband. The patient had continued to suffer from periodic outbursts of jealous behaviour when she accused her husband of infidelity. The other woman had left the district but the patient accused him of keeping in touch with her. The patient admitted that she could not get these ideas out of her mind when she was in her husband's presence. She found that on the rare occasions when they had sexual relations she felt much more relaxed. She was beginning to believe that separation would be the best solution. A legal separation was advised.

A year later her husband reported that she was much improved but still suffered from periods of depression. Peace in the house was obtainable by the husband's submission. The patient continued to do her housework well and attended her general practitioner only for maintenance endocrine therapy.

Case 40

Mr. R.A.P., *aet.* 27, toolmaker, was seen as an out-patient in December, 1958. He came from a working-class background, from a happy, united family with no history of nervous or mental disease apart from the senile confusional illness of a maternal grandmother; the patient was the second of four siblings. He had always been a quiet, shy person with few friends and solitary interests, house-proud and possessive with a worrying disposition. He was a skilled worker with an adequate work record. He was teetotal in his habits. The patient married a girl six years his junior when he was 23; their three children were aged 3, 2½ and 1. The marriage had been happy until one year before the consultation; the sexual relationship had always been satisfactory. The patient's physical health had been good.

The patient's symptoms were closely linked to marital difficulties. A weak-willed, easy-going girl, his wife had been depressed to find herself pregnant at the age of seventeen and had committed adultery within a few months of marriage. The patient learnt of this and forgave her at the time but two years later, after the birth of her second child, she contracted a relationship with another man; the patient was then suspicious of her conduct but lacked proof. For one year before he was seen the patient had become easily fatigued and had displayed violent bursts of temper and bouts of sulking. He brought up the subject of his wife's misconduct frequently and accused her of continuing with affaires in his absence. The wife had felt very guilty about her previous conduct but despite her repeated assurances she was unable to convince the patient of her innocence.

On examination the patient showed a good grasp of the situation and its antecedents. He was anxious and agreed that he had been depressed but was in a position to understand the source of his worries and to deal with them unaided. He was discharged to the care of his general practitioner.

Diagnosis: Anxiety state.

Case 41

Mr. W.C.M., *aet.* 42, pharmacist, was admitted to hospital on 17.3.55 from the out-patient department. He came from a comfortable middle-class background; both parents and one paternal uncle had suffered from depressive illnesses; one brother had been treated for a depressive illness in the course of which he had expressed concern about his wife's infidelity. The patient had always been a quiet, reserved man lacking in self-confidence; he had suffered many episodes of depression and irritability; he was subject to spells of exhaustion but his work record was good; he drank alcohol rarely. He had been married for nine years; the marriage was never very happy; the wife tended to demand more affection than the patient was able to give her; sexual relations were said to have been satisfactory; there had been no infidelity on the part of either spouse. They had one child aged 7. There was no history of serious physical illness or of mental disorder.

Six months before his admission the wife's father died, an event which upset her and made her more depressed and irritable towards the patient. Shortly afterwards she met and became attracted to another man. Although their relationship never flowered her feelings towards her husband became more antagonistic and there was a falling off in their physical relations. The patient became first upset and very attentive and then began to entertain ideas about his wife's possible misconduct; he began to ruminate about her feelings and behaviour to the exclusion of almost every other subject; he became increasingly depressed and was eventually compelled to seek medical advice.

On admission to hospital he was depressed, agitated, tense and pre-occupied with his wife's behaviour. He was at no time deluded and always stated he might have been mistaken. He was nevertheless unable to prevent himself from thinking about the other man though he was in fact mistaken about the person whom he suspected. Soon after admission his symptoms receded. He was treated with psychotherapy. At the time of his discharge he was able to discuss his former ideas rationally and without agitation.

Diagnosis: Depressive illness.

Follow up: Eighteen months after discharge the patient was working but was still liable to periods of depression and agitation which were dominated by his suspicions concerning his wife. The marriage had continued and the wife had stated that she would not press for a separation.

Case 42

Mr. J.A.B., *aet.* 39, general foreman, was seen on a domiciliary visit on 13.10.53. He came from a working-class background, the elder of two siblings; there was no family history of nervous or mental disease. He had always been a shy, sulky, nervous child; as an adult he was noted for his high and rigid moral standards; he had few friends, his work record was good. He drank very little alcohol. He had married *aet.* 26; there were two children *aet.* 9 and 7; he had had no pre-marital sexual experience; the marriage was satisfactory for the first few years though there was always some sexual difficulty; there had been no infidelity on the part of either spouse. The patient's previous medical history was clear.

About one year before the patient was seen his wife had developed gynaecological symptoms which eventually necessitated an amputation of the cervix. At the same time she began to take an interest in another man, though no intimacy occurred. The marital relationship began to suffer and the wife's operation provided her with a strong reason for continence. The patient became increasingly depressed and moody; he lost interest in his children and the home and he began to act in a jealous manner; he became more violent in his demands for physical relations and questioned his wife persistently about her reaction during intercourse and her feelings for the other man. He took to watching his wife while she slept and then waking her to accuse her of erotic dreams. He frequently stated that he felt lost and hopeless and often threatened suicide. The wife expressed little sympathy for his reaction.

On examination he was a quiet, withdrawn individual who was pre-occupied with his marital difficulties. He was moderately depressed and discussed his feelings towards his wife rationally. He admitted that he had always been a possessive person but that only in the previous year had he become dominated by his feelings of jealousy which were accompanied by depression. He was advised to attend an out-patient department with his wife for psychotherapy.

Diagnosis: Neurotic depressive reaction in an inadequate personality.

Follow up: The patient received six months' out-patient therapy, including individual interviews with intravenous methedrine and drinamyl. His mental state remained unchanged. The wife remained adamant in her attitude towards him and eventually decided to leave him and seek legal advice with a view to obtaining a separation. The patient then discontinued his attendances but four years later his general practitioner reported that he had adjusted himself well to his situation.

Case 43

Mr. R.C.H., *aet.* 40, telephonist, was referred to hospital because of marital difficulties on 13.9.56. He came from a working-class background; the mother was epileptic but there was no history of nervous disease in the family; the patient was the youngest of five children and had been brought up in an orphanage from the age of five. In his youth he had been cheerful though never very sociable but for several years he had been known as a moody, anxious and worrying person. His work record was adequate. His drinking habits were temperate. He had been married for eight years; his wife was an Austrian woman who had one illegitimate child at the time of marriage. After the birth of a boy in 1950 the wife made it clear that she did not want any more children by him and insisted that they practise coitus interruptus; she began to go out to work and told him many times that her feelings for him were dwindling. Neither spouse had been unfaithful. There was no history of serious physical illness.

During the five years before referral the patient had become increasingly difficult in his behaviour towards his wife. He accused her of inefficiency over numerous small domestic details and of misconduct with other men occasionally; at the same time he made excessive sexual demands on her, sometimes of an abnormal nature. The wife had announced her intention of leaving him on several occasions; this threat tended to evoke remorse and self-pity. On examination the patient was distressed but able to give an adequate account of the difficulties he experienced in controlling his suspicions though he realized that they were unfounded. He attributed his symptoms to his need to be certain of his legal possessions. It was felt that the marriage was doomed to failure; the patient and his wife were given advice about legal aid with a view to obtaining a Separation Order.

Diagnosis: Anxiety state with depression, inadequate personality.

Follow up: The patient's wife consulted a free Advice Centre and was advised to apply for divorce on the grounds of cruelty.

Case 44

Mr. J.K., *aet.* 55, caretaker, was seen on one occasion in the out-patient department in December, 1957, having been referred from a Marriage Guidance Bureau. He was one of twelve siblings of Irish Catholic farming stock. There was no history of nervous or mental illness in the family. His home life was happy and united and his early years were uneventful. After a period of farming he became a policeman in Ireland and then retired at the age of 53, coming to London later in the same year. He had never been a heavy drinker. He had the reputation of being a particularly pleasant, sociable individual, popular and seemingly of an easy-going temperament. He had a magnificent physique and had excelled at several forms of athletic activity. Since his late 'teens he had indulged in many heterosexual adventures until his marriage *aet.* 30. His wife was six years younger than he, also an Irish Catholic but of a rather higher social status. To all appearances the marriage was very successful; there were two children, *aet.* 25 and 22, and there had been no suspicion on the part of friends or relatives that the patient and his wife might be unhappy. In fact marital relations had been strained from the beginning. The major problem had resided in the patient's excessive physical demands on his wife; he demanded intercourse daily, sometimes as often as on three occasions in one day; his wife was reluctant to satisfy his demands and they quarrelled frequently on this score. On two occasions she had tried to minimize the problem by moving some distance from his site of work but on both occasions he followed her and on his retirement from the police force they both came to London as joint caretakers. Neither spouse had been unfaithful. The patient's mental and physical health in the past had never given occasion for concern.

About eighteen months before the consultation the patient had begun to wonder whether his wife might be unfaithful. At about this time she had felt that she was at the end of her tether and had made a determined effort to refuse physical relations. The daughter was sympathetic but not the son. From this time onwards the patient became more and more resentful and accused his wife of carrying on with other men, of taking up prostitution and of setting out deliberately to cause him unhappiness. Their relationship deteriorated rapidly and eventually she sought medical advice at a Marriage Guidance Centre. The wife then left the patient who came up to hospital unaccompanied.

On examination he was a well-built man in excellent health for his age. He was mildly depressed and admitted that he did not know what the future held in store. He stated that he knew his wife to be innocent of his accusations and that the cause of their discord lay in his excessive sexual demands. There were no overt psychiatric abnormalities. It was felt that in the circumstances nothing useful could be done to help either the marriage or the patient.

Diagnosis: Personality disorder.

Case 45

Mr. T.O'N., *aet.* 35, foreman, was referred to the out-patient department by his general practitioner on 19.7.59. He came from a working-class family, the youngest of four brothers. His father had never had a satisfactory work record as a bricklayer; he had been a heavy drinker, violent to the mother on many occasions, associating with other women from time to time. There was a history of unspecified mental disturbance on the maternal side of the family. The patient had always been a jealous child, subject to nightmares and temper tantrums but there had been no overt psychiatric disability during his early years. His schooling was without incident. He joined the R.A.F. during the war and on his discharge worked in a number of jobs until he settled down as a foreman in a local factory. Since his early twenties he had drunk beer in excessive quantities at week-ends. He had always been self-conscious about his small physique and had indulged in body-building exercises throughout his early adult life. He was married in 1943 at the age of 20. His wife at this time was sixteen and the first two years of their marriage were spent by the patient abroad in the R.A.F. They had three children, *aet.* 12, 10 and 8, all girls, all of them well. The marriage had not been a happy one (see below]. The patient's physical health had been good and he had not suffered from any mental illness in the past.

During the first two years of their married life the patient was out of England on service duty. At this time he received a number of anonymous letters accusing his wife of misconduct. On his return he questioned her closely and she denied the allegations. From then on, however, he rarely failed to dwell on the period of his absence and his attitude towards her was never free of suspicion. Their sexual relations were not satisfactory and from time to time he accused her of consorting with other men. In fact, the patient had had an affaire with a friend of his wife's although he had always denied this to her. From time to time, and especially when he was in his cups, the patient behaved in a violent manner towards his wife. She induced two miscarriages with his concurrence. For about one year before the consultation the wife had begun to meet a married man with whom she began an affaire unbeknown to the patient. She promised the patient that she would stay with him until the children were older and the patient had met the other man; there had been a violent scene on this occasion. Faced with the prospects of marital break-up and also with the realization of what he had feared for so long the patient's conduct deteriorated. He attempted to strangle his wife on two occasions, threatened suicide and became more violent than ever. Eventually she sought medical advice.

On examination at the out-patient department the patient was a slightly built, anxious little man who was on the edge of tears. He freely admitted his personal difficulties regarding

his wife—"I'm so jealous that when I see anyone near her I want to hurt her. I have always loved her but I do not think she has returned my affection. This jealousy is something I can feel in my stomach and when it comes out of me there is nothing that I can do about it. That is why I behave so madly . . . My wife is always telling me about the other man and says that he is stronger that I am and that he can beat me . . . I'm not a big chap or a handsome chap but my wife is so pretty and I don't think I come up to her high standards". There were no other morbid ideas elicited. He was of average intelligence clinically.

Diagnosis: Anxiety state in an inadequate personality.

Follow up: The patient refused psychiatric help.

Case 46

Mr. L.E.T., *aet.* 37, foreman carpenter, was admitted to hospital on 10.8.54 after a domiciliary visit. He came from a lower middle-class background, the youngest of six siblings. His father had died in his early 60s: he had been a violent man, addicted to alcohol for long periods of his life; he had also been suspicious and jealous of his wife, whom he had accused of misconduct when he was in his cups. One of the siblings suffered from a neurotic illness but there was no other history of nervous or mental disease. The patient had passed a healthy and happy childhood but from early adolescence he had developed feelings of inferiority which were attributed to his having to wear spectacles at the time; he became dissatisfied with his physique and his poor muscular development. His work record had always been good; he was in the army during the war, fought at Dunkirk and on the Normandy beaches and reached the rank of staff sergeant by 1946. He had always been of moderate habits and drank very little alcohol. He was married *aet.* 18 to a woman 4 years his senior; their first child had been born one year before marriage and two more children arrived within the next 3 years. The marriage had been satisfactory for the first few years but then deteriorated steadily; both the patient and his wife had been unfaithful (see below). The patient had always been sexually over-active. There was no previous history of serious physical or mental ill-health.

The patient had become jealous of his wife as soon as they were acquainted though he was not 16 years of age at the time. The wife stated that she had been glad of this at first, regarding his behaviour as a sign of affection. Soon after the birth of his first child, however, he wrote her a note while she was still in hospital stating that he felt certain that her brother-in-law was the father. Quarrels broke out easily if there were any suspicion of her looking at or talking to another man. He checked on her movements, looked for stains on her clothes and worried about what she was doing in his absence. Nevertheless the relationship was maintained satisfactorily for many years and for two or three years after the war the patient's suspicions appeared to have abated. In 1950 he went to the Far East and his wife joined him there several months later. He wrote warning her to be careful of men on the journey and when she reached him he accused her of having committed adultery on the boat. His wife then confessed to an affaire on the voyage and the patient became so upset that he was advised to enter hospital. He continued with his work but started to drink heavily and constantly implored his wife to confess her past misdemeanours. Under great pressure she then told him for the first time of several incidents extending over the past 10 years. From this time he found it difficult to work and began himself to indulge in a series of affaires with married women; he maintained that his purpose was to discover whether a faithful woman could be found. From time to time he struck his wife and he accused her frequently of nymphomaniacal activities. He became very depressed periodically and on one occasion made a suicidal gesture. His sexual activities increased and he boasted of his prowess. He was eventually persuaded to enter hospital because of the strain at work.

On examination he was a small, anxious man whose talk was dominated by his wife's behaviour. He was depressed at times but there was no evidence of other morbid ideas or of perceptual anomalies. He admitted to marked feelings of inferiority. An attempt was made to treat him with distributive psychotherapy. It emerged that he had been aware of feelings of inferiority for some years, that he had put his mother on a pedestal and had hated his father. He admitted also that he had always wanted to marry "an ideal woman" and that her confession had deprived him of faith in women. His mood in hospital fluctuated according to whether or not he was able to persuade himself that his wife would have been unfaithful if his continuous questioning had not driven her to other men. It was not possible to alter his views by the time of his discharge on 5.10.54. His wife stated then that she would leave him unless he changed his attitude.

Diagnosis: Anxiety state and depression in a vulnerable personality.

Follow up: In March, 1955 his wife stated that although the patient had been less insistent for three months after discharge he had then begun to bring up his old accusations, demanding a confession. She began to believe for the first time that he was mentally unwell and she was frightened of the prospects of physical violence. She came up to ask for legal advice about separation but she admitted that she was reluctant to leave her husband because of her own guilt and because she felt that he loved her and needed her.

Case 47

Mr. F.R.S., *aet.* 47, chauffeur gardener, was admitted to hospital on 11.9.57. He came from a lower middle-class background in which there was no family history of nervous or

mental illness. He was known as an undemonstrative, perfectionistic man, obedient to a rigid and conventional moral code; he was a worrier, but had never been unduly suspicious or critical; he drank beer occasionally. He had been married for 25 years to a warm-hearted, capable woman on whom he had always been dependent; sexual relations were satisfactory; there was no infidelity on the part of either spouse. There had been no previous physical illness of importance.

The patient had suffered two previous depressive illnesses, both of them related closely to environmental difficulties which threatened his personal standards and status. In 1942 he had failed his N.C.O. examination in the army and was depressed for some months though he was at the same time critical of his military superiors; in 1954 he became depressed again following a disagreement with his employer by whom he felt slighted. On both occasions the depression lifted spontaneously.

Eight months before admission to hospital the patient's eldest daughter became engaged to a young man of whom the patient disapproved. The fiancé was of a gay disposition and won over the patient's wife with whom he established a semi-flirtatious relationship. The patient quickly became depressed and resentful; he accused his wife of being in collusion with the young man and on several occasions accused her of adultery with him. He became argumentative and struck her on three occasions; after his outbursts of anger he became contrite and over-affectionate. Sexual relations decreased but did not cease. The patient was able to continue working throughout though his sleep was poor.

On admission to hospital he was mildly depressed but able to discuss his symptoms rationally and without evidence of delusional thinking; he was irritable and given to bouts of weeping during the first week. Following discussion of his difficulties into which he had considerable insight he made a rapid spontaneous recovery and by the time of his discharge on 19.10.57 he was asymptomatic.

Diagnosis: Reactive depressive illness.

Follow up: The patient remained well for a year and then attended hospital complaining of a return of depressive symptoms and further suspicions of his wife. These symptoms had followed on a court case involving his son; he was seen on several occasions but not given specific treatment and he was free of symptoms after six weeks.

Case 48

Mrs. B.S., *aet.* 24, housewife, was admitted from the medical department of a general hospital on 18.8.58. She came from a working-class background; her father was a railway worker, a drunkard who behaved very badly towards his wife and children; the mother died ten days after the patient's birth and shortly afterwards the father married a woman who showed little sympathy towards her step-children. The patient was the second of three siblings. She had demonstrated numerous neurotic symptoms in her unhappy childhood she had always been regarded as unstable, stubborn and easily led. Her school record was adequate but she had a very poor work record and had held numerous jobs for short periods. Since her early adolescence she had indulged in sexual activities with her siblings and with numerous boys; she gave birth to an illegitimate child at the age of seventeen. She drank very little alcohol. At the age of twenty she contracted an unhappy marriage which was dissolved two years later. Soon after her divorce she married an older man who had shown much sympathy and understanding towards her. The marriage was under a strain from the beginning, the patient making more physical demands on the husband than he was able to satisfy. His sexual incapacity led her to accuse him of an interest in other women and quarrels began. There had, however, been no infidelity by either partner. There were no children of the marriage. Since the age of fifteen the patient had suffered from syncopal attacks but there had been no evidence of epilepsy. For four years she had suffered from the symptoms of a gastric ulcer which had perforated when she was twenty-one. A few weeks before admission the symptoms had returned and a barium meal had revealed a high gastric ulcer for which she was admitted to a general hospital. While she was in hospital under treatment for her ulcer she had developed depression and irritability. On her discharge she neglected her husband and her home; when the pain became more severe her depression deepened and she made a half-hearted suicidal attempt. She was re-admitted to the general hospital and seen by a psychiatrist who advised in-patient psychiatric care.

On examination she was a thin, pale girl, with a non-toxic adenoma of the left thyroid lobe and some epigastric tenderness. She was tense, anxious, depressed and self-depreciative; she declared herself to be suspicious of her husband's conduct while she was in hospital; she recounted many trivial incidents to which she had attached significance and admitted that while she was depressed and in pain the idea that her husband might be deceiving her increased in force, especially when she was unable to leave hospital.

She remained in hospital for two months. Her conduct fluctuated, at times assuming a violent character; on other occasions she became negativistic and unco-operative. Her ulcer responded to medical treatment and as the pain receded so her depression and her suspicions of her husband became less pronounced. She was discharged on 26.10.58.

Diagnosis: Psychopathic personality with depression.

Follow up: One year later the patient had remained out of hospital suffering occasional bouts of dyspepsia. She had also displayed short-lived episodes of depression in which she

was liable to accuse her husband of misconduct. Though the husband's patience was sorely tried he did not contemplate separation or divorce.

Case 49

Mr. L.B., *aet.* 32, electrician's mate, was seen in the out-patient department in July, 1958. He came from a working-class background, the youngest of five siblings. Many members of the family were unstable and alcoholic; one uncle had been a patient in a mental hospital and one brother was mentally ill at home. The patient had been regarded as a nervous, anxious, worrying incompetent person; he had a poor, unskilled work record but had given satisfactory naval service. During his period of military service he had been a heavy drinker. *Aet.* 27 he married a stable, maternally minded woman who admitted to having accepted him out of pity rather than affection. There was one child *aet.* 2½. Sexual relations had been satisfactory only for the first few months; neither partner had been unfaithful. There was no history of previous physical or mental illness of note.

Evidence of morbid personality traits had been overt since he first met his wife. From the earliest days of courtship he had entertained hypochondriacal ideas for which he sought reassurance. The marriage had not been consummated for three weeks because of his fear of venereal disease. He had also worried excessively about money, housing and other domestic problems. His domestic behaviour had been childish and he had refused to give any assistance at home even when his wife was over-burdened. For the first two years of married life he had been morbidly jealous, following her along the streets and forcing her to give up work; he refused to allow her to speak to neighbours or friends and had threatened her if she associated with males in any way. This reaction, however, subsided after the wife became pregnant and the hypochondriacal fears came to dominate the patient's mental state.

At the time of examination, he was complaining of a fear of cancer from which an uncle had recently died. He appeared anxious but disclaimed other symptoms, stating that his previous difficulties were over. He was not overtly depressed and there was no evidence of other morbid ideas. His wife stated that marital relations had deteriorated so seriously that she was contemplating separation.

Diagnosis: Immature personality with neurotic traits.

Follow up: Within a few days of the consultation the patient presented himself at a general hospital requesting an examination for venereal disease. He was depressed and talked of the possibility of taking his life. Admission to a mental hospital was advised but refused.

Case 50

Mrs. M.H.S., *aet.* 33, housewife, was seen on a domiciliary visit in November, 1954. She was the only child of lower middle-class parents. There was no family history of nervous or mental illness. Her early years were uneventful and she was regarded as a stable, cheerful, hard-working person. She drank alcohol very rarely. The patient was married at the age of 21; her husband was a reserved and irritable man; there were two children *aet.* 11 and 2. The marriage was unhappy at the outset, with constant quarrels and disagreements; sexual relations were poor but neither partner had been unfaithful. There was no history of previous mental or significant physical illness.

Eighteen months before she was seen the patient had begun to blame her husband for withholding from her the affection which, she stated, he showed towards other women. On his return from work she upbraided him and accused him of neglecting her. During this period she had eaten poorly, lost weight and had been sleeping badly; she was frequently depressed and lachrymose. When her agitation receded she admitted that she did not believe that her husband had deceived her but she found even the thought of his demonstrating affection to other women insupportable. Over the six months before her medical consultation she developed a fear of going out in daylight and she spent most of the time at home.

On physical examination she was mildly depressed and unwilling to leave the house even to attend hospital. She showed some insight into her jealous behaviour and disclaimed any belief in her husband's infidelity. There was no disturbance of thinking or any other psychiatric abnormalities.

Diagnosis: Depressive reaction with phobic features.

Follow up: The patient was persuaded with difficulty to attend the out-patient department for discussion of her difficulties but she discontinued treatment of her own accord.

Four years later the general practitioner reported that she had remained in a state of "diplomatic peace" with her husband and had not consulted him at all during that time.

Case 51

Mr. K.H., *aet.* 37, electrician, was admitted to hospital on 12.3.58, after a period of treatment as an out-patient. He was the only child of a family in which there was no evidence of nervous or mental disorder. Following parental separation he lived with his grandparents from the age of seven until adolescence and his childhood was an unhappy one. As a child the patient demonstrated numerous neurotic traits, in particular night terrors, nail biting and somnambulism. He was a shy, anxious person, affectionate but impractical and dependent on the people with whom he came in contact; he had always been liable to bouts of depression

and anxiety. After an average scholastic career his occupational history had been chequered and his attempts to start his own business had been unsuccessful. He drank very little alcohol. He was married at the age of twenty-five to a shy, worrying woman; they had four children, *aet.* 11, 10, 9 and $2\frac{3}{4}$. The patient had indulged in occasional promiscuity before and after marriage but the wife was fond of him and had remained faithful. He had always been jealous of her. There was no history of previous physical disease but the patient had often attended his practitioner for "nervous dyspepsia" in the past.

For two years the patient had been increasingly depressed, complaining at times of feelings of panic and of fears of death. A year before his admission he had entered a mental hospital for three months where he had participated in group discussions without much benefit. He found his work increasingly difficult and became hostile and taciturn. An attempt was made to treat him on an out-patient basis but he became more depressed and was persuaded to enter hospital.

On examination there were no physical abnormalities. Mentally he was a tense, anxious man who was moderately depressed; he admitted that he was pre-occupied with numerous jealous thoughts which he had held at home and at work. There were no other abnormalities in his mental state. His intelligence was average. He was treated with E.C.T. on four occasions and responded well, expressing optimism about the future and disclaiming all of his depressive ideas. He was discharged on 28.4.58.

Diagnosis: Depressive illness in an inadequate personality.

Follow up: Eighteen months after discharge he was working and had remained well for the most part. He had been subject to occasional panic attacks but was not unduly troubled by them.

Case 52

Mr. J.S.P., *aet.* 53, manager of a retail shop, was admitted to hospital on 17.6.57 following an out-patient consultation. He came from a working-class background, the sixth of ten siblings. Although one of his sisters suffered from depressive episodes there was no clear evidence of family history of nervous or mental illness. From early childhood the patient had demonstrated a number of neurotic symptoms; he had been afraid of the dark, had bitten his nails and had suffered from nightmares with enuresis until the age of 6. He was a timorous youngster, terrified of school and with a poor academic record. His occupational history, however, had always been good and he had become the manager of a fishmongering firm; his service record was also adequate. He had drunk some alcohol during his adult life, especially when he felt depressed but he had not shown evidence of excessive drinking until the onset of his illness. He married first at the age of 30; his wife was ten years his junior and died in 1952; there were eleven children of this marriage, three of whom were adopted. The marriage was never a happy one and six months after his first wife's death he began cohabiting with a 25-year-old married woman by whom he had two children before they were able to marry in 1958.

The patient had suffered from no serious physical illness in the past but at the age of 15 he had the first of several panic-attacks and in his early twenties he was treated in hospital for somatic symptoms of anxiety. He was re-admitted to hospital for the same reason at the age of 33 and again *aet.* 45 when he received E.C.T. because he was also considered to be depressed. On this occasion it was noted that he was subject to obsessional ruminations with a host of phobias; he received some psychotherapy and was discharged after six weeks. Four years later he was seen as an out-patient at another hospital where his condition was observed to have changed very little. His symptoms eventually made it difficult for him to continue working, he began to drink heavily and in June, 1957 entered hospital where a diagnosis of a phobic state with alcoholism was made. He was treated with antabuse, barbiturates and psychotherapy and he improved sufficiently well to be discharged on 19.8.57, though with a guarded prognosis.

On his discharge the patient appeared to do well for a short time but soon began to experience his old symptoms of anxiety and panic attacks in the presence of other people. At the same time he began to develop ideas of jealousy and suspicion about his wife. These gradually became more difficult to resist. He felt that his morose, withdrawn attitude did not satisfy his wife and he began to suspect that she was indulging in sexual relations with other men. He brooded constantly on the difference between their ages. As his symptoms of anxiety and depression became more pronounced so his ideas of infidelity became stronger. He admitted to his wife that he wanted to keep her at home where she could at any time satisfy his sexual demands; these he put on a par with his drinking as outlets for his worried state of mind. His drinking was not so troublesome during this period. He became depressed at times and made a suicidal gesture, principally to frighten his wife. He was re-admitted to hospital in November, 1958. On examination he was depressed but stated that he was aware of the fact that his jealous thoughts were without substance. He felt nonetheless that he could not resist their force at home. He was treated with supportive psychotherapy and E.C.T. but after the fourth convulsion he absconded on 30.12.58 because of his fear of physical treatment.

Diagnosis: Depression, obsessional phobias; morbid jealousy.

Follow up: It was not possible to follow up this man for more than a few weeks after discharge and at this time his mental health appeared to be precarious.

Case 53

Mr. R.M., *aet.* 45, fitter's mate, was admitted to hospital on 8.6.53 after an out-patient consultation. He came from a working-class background. His childhood had been unhappy following the desertion of his mother by his father. He had always been a meticulous, sensitive and suspicious person. His work record was good. He was an occasional drinker. He married at the age of 24. There were two children, *aet.* 20 and 16. The marriage had been satisfactory on the whole and sexual relations were adequate. Neither spouse had been unfaithful. The patient had suffered no mental disorder or serious physical illness.

During his courtship the patient had often accused his fiancée of infidelity; from the beginning he admitted that his suspicions were groundless and complained of his inability to overcome his suspicions. Throughout their married life these ideas had recurred. After fifteen years of marriage his wife decided to go out to work and the patient then became more suspicious of her conduct. He developed somatic symptoms of dyspnoea, pressure on the chest and abdominal discomfort. He consulted various physicians but all physical investigations were negative. His symptoms remained troublesome and his accusations became more persistent. He accused his wife of committing adultery with a man in another flat and bitter quarrels resulted. A year before admission to hospital he became partially impotent and his somatic symptoms interfered with his work for the first time. He spent many hours at work brooding over his morbid ideas intil his general practitioner persuaded him to enter hospital.

On examination he was co-operative and admitted that although he had accused his wife of misconduct for many years he had not believed in her infidelity; he stated spontaneously that his ideas had a compulsive quality that he could not resist though he fought against them. He was mildly depressed and worried about his physical health. No delusions or perceptual anomalies were elicited. He was treated by psychotherapy and had improved by the time of his discharge on 17.8.53.

Diagnosis: Paranoid personality.

Follow up: He attended the out-patient department until March, 1955 at which time he was complaining of sexual inadequacy, physical symptoms and suspicions of his wife.

Case 54

Mr. J.H.H., *aet.* 33, plasterer, was seen at the out-patient department in March, 1957. He came from a working-class background, the younger of two brothers. His father had been a difficult, jealous man and the patient's childhood was most unhappy. He was a hard-working perfectionistic individual with numerous obsessional traits. His work record was excellent. He drank very little alcohol. He had been married happily for ten years; there were two children, *aet.* 3 and 5; sexual relations had always been adequate; neither spouse had been unfaithful. There was no history of mental illness or of serious physical disease.

The patient had been irrationally jealous of his wife since their courtship; he had always been able to control his feelings but the couple had quarrelled at times. A few weeks before his visit to hospital the patient had experienced difficulties at work and had seemed to be depressed. He began to smoke excessively, lost his appetite and was unable to sleep at night. He began to entertain the idea that his wife was committing adultery with his own father. This accusation upset the wife who consulted the general practitioner.

On examination the patient was depressed but able to discuss his morbid ideas rationally. He emphasized the compulsive quality of these ideas which he had always tried to fight; with the onset of depression his resistance was lowered. He stated that he was almost certain that he was mistaken in his suspicions but that he could not keep the ideas out of his mind and had talked of little else to his wife; he had looked for seminal stains on her underclothes. He reported an improvement as his depression began to lift.

Diagnosis: Depressive illness with obsessional symptoms.

Follow up: The patient was seen three weeks later. Following his discussion with the psychiatrist he had felt reassured and his depressive symptoms had rapidly resolved. At the same time he had lost his suspicions of his wife. He appeared to be asymptomatic although the obsessional personality traits were in evidence.

Case 55

Mr. F.C.S., *aet.* 53, no fixed occupation, was admitted to hospital on 26.9.57. He came from a working-class background, the third of four siblings. There was no history of nervous or mental illness in the family. The patient's mother died when he was 9 years old and his later childhood was most unhappy. He was a solitary individual who had always tended to take the gloomy view and was nicknamed "sad Freddy". Though he was rarely out of work he changed his clerical jobs frequently because of disagreements with his employers. He did not drink excessively. At the age of 21 he married a woman who was sexually frigid and who exhibited many neurotic traits. Within a few months of the marriage the patient began to have sexual relations with his wife's sister; this relationship lasted for 27 years without his wife's knowledge. The wife had never been unfaithful to the patient. They had no children. There was no history of serious physical illness.

Shortly after commencing the affaire with his wife's sister the patient displayed suspicions of his wife's conduct. He accused her of consorting with other men with whom she worked

and disliked to see her in conversation with other people. He did not search for evidence but he never accepted her protestations of innocence and he frequently struck her in order to make her confess. In 1953 a probation officer was consulted about their matrimonial difficulties and referred him for out-patient psychiatric treatment. Eighteen months before his admission to hospital the patient lost his conviction that his wife was being unfaithful but developed obsessional thoughts centred on the desire to kill her. His thoughts became more insistent and he became increasingly depressed.

On admission to hospital he denied being jealous of his wife, stating that she was too old for misconduct. He admitted to having ruminated about her possible infidelity until eighteen months before his admission. His principal complaint was of compulsive thoughts bearing on her past behaviour and the desire to kill her; he claimed that these thoughts made him feel depressed. He was treated with psychotherapy in hospital and was discharged "improved" on 9.12.57.

Diagnosis: Obsessional neurosis in an abnormal personality.

Follow up: The patient was seen on one occasion three months after discharge. At this time he was still subject to bouts of depression and was complaining occasionally of phobias of heights; he was working and the marital relationship was being maintained.

Case 56

Mr. L.J.P., *aet.* 30, film packer, was admitted to hospital from an out-patient department on 30.1.54. He had an unhappy working-class background; his father was a heavy drinker who had often behaved in a jealous manner towards his wife; his mother was blind, a possessive woman who also drank heavily. There was no history of overt mental disease in the family. He had always been attached to his family and was regarded as an irritable, self-conscious person. His early work record had been irregular but his six years' service in the army were exemplary and he had boasted an excellent work-record since demobilization. He drank alcohol rarely. Before his marriage the patient had had occasional heterosexual contact with prostitutes. He met his wife in 1952 and became unreasonably jealous almost immediately, accusing her of flirting with other men; he always recanted when she denied his accusations but he returned to them time after time. His wife had told him of her own pre-marital experiences, but he married her nevertheless in March, 1953, eight months before admission. There was no previous history of significant illness.

From the time of his marriage the patient became more intensely jealous. He accused his wife of having had numerous affaires before marriage (this was untrue) and he made her leave her work as a telephonist because he feared her contact with other men; he tended to twist her conversation to show that she was faithless and at the height of his paroxysms he would rake up old incidents and invent others. At no time, however, was he convinced that she was deceiving him and he admitted that he was aware of his tendency to fabricate when he became upset. After heated arguments with his wife he became contrite, apologetic and very depressed. Their physical relations were satisfactory and he was never unfaithful. The marital difficulties eventually led the patient to consult his general practitioner who advised him to see a marriage guidance counsellor; the counsellor recognized the morbid nature of his difficulties and recommended psychiatric treatment.

In hospital he was at first anxious, tense and also depressed, admitting that he had contemplated suicide in the previous weeks. There was no evidence of delusional thinking or of perceptual anomalies. He was treated with psychotherapy for six weeks. His feelings towards his wife fluctuated; at the time of his discharge on 30.3.54 he stated that he felt nothing but love for her.

Diagnosis: (1) Obsessional neurosis; (2) anxiety and depression.

Follow up: Three months after discharge the patient and his wife were known to be together though he remained moody and was jealous at times.

Case 57

Mr. H.C.M., *aet.* 32, chemical worker, was admitted to hospital on 27.9.54, from the out-patient department. He came from a working-class background, the youngest of four children. The father was a remote figure but the patient had been very attached to his mother. There was no family history of nervous or mental disease. The patient had always been regarded as a good mixer though he had few friends. His work record was good and he had seen action on military service. He drank alcohol infrequently. The patient was married at the age of 32 and was happy until the onset of his illness; he had three children, *aet.* 7, 5 and 3; sexual relations had been satisfactory and there had been no infidelity since marriage by either spouse, though both had had sexual experience previously. The patient's health record had been adequate except for a series of hypochondriacal complaints which began while he was in the army and which had led him to seek medical reassurance on three occasions.

From the beginning of their married life together the patient had spoken of the wife's pre-marital liaison from time to time. During the twelve months before his admission he had come to speak of this more and more frequently and in the preceding three months he had spoken of little else. He questioned his wife all the time about the affaire and was particularly interested in the most intimate physical details. Between questions he gave vent to outbursts of

rage in which he would destroy crockery and furniture and strike his wife savagely; after these paroxysms he would be full of remorse and depressed for a time. He had lost weight, was eating and sleeping poorly and found it almost impossible to concentrate on his work because of his pre-occupation with his wife's former conduct. At no time did he accuse her of deceiving him since her original affaire. His sexual activity had increased with the intensity of his symptoms.

On examination he was tense and anxious, displaying considerable psychomotor agitation. His mental state was dominated by his ruminations on his wife's past conduct, these thoughts exhibited obsessional qualities for he recognized their undesirability but was also unable to resist them. He was mildly depressed; there was no evidence of delusional thinking or of hallucinations. During his stay in hospital he received intensive individual psychotherapy, at times with intravenous methedrine and sodium amytal injections. Many psychological themes were explored, particularly his early attachment to his mother and his fears of psychotherapy. There was no evidence of homosexuality at any time; he became more depressed during therapy and complained of depersonalization. At the time of his discharge on 21.12.54 he had improved symptomatically but this was thought to be related to the physical separation from his wife.

Diagnosis: Morbid jealousy.

Follow up: The patient was seen on several occasions as an out-patient but shortly after his return home his symptoms became worse and he became so aggressive towards his wife that re-admission was arranged on 21.3.55; he remained in hospital from that date until 30.11.55. During this time he received intensive psychotherapy; in the course of interviews which were conducted after the administration of intravenous lysergic acid he became strongly attached to the therapist. There was little improvement in his clinical state, however, and depressive features supervened strongly enough to merit a course of E.C.T. He was also given reserpine while in hospital. During the whole of this time the patient constantly referred to his wife's misconduct in the past; at no time did he maintain that she had deceived him since the marriage. He stated throughout this time that he still loved his wife; their sexual relationship continued when he visited his home but he was able to obtain orgasm only when he imagined himself as the third party. On his discharge the patient was less anxious than on admission but his symptoms were unaffected. Some social work was necessary to help the patient find accommodation and employment since his long stay in hospital had resulted in the loss of his job.

Following his second discharge the patient was seen regularly on an out-patient basis and given supportive psychotherapy and various phenotropic drugs. Home life remained stormy and his condition continued to demonstrate a phasic intensity. In 1956 admission to a mental hospital was recommended but the patient refused to go. A year later, in September, 1957, it was apparent that the domestic situation was becoming intolerable to both the patient and his wife and admission to a mental hospital was again advised and this time accepted; he remained in hospital for two months and was very disgruntled throughout this time.

Case 58

Mr. J.N., *aet.* 41, boiler stoker, was admitted to hospital on 30.6.58, from the out-patient department. He came from a poor, working-class family. His father had been a park-keeper, a violent man who had often been unemployed, and had shown his family little affection; the mother died *aet.* 66 after having taken to drink in her later years following a careworn existence. The patient was the fourth of ten children; two of his siblings had suffered from depressive illnesses and one was known to be a difficult and moody person. There was no other family history of mental or physical illness. In his personal development the patient had not demonstrated neurotic traits and he was known as a sociable, home-loving person who worried over details; he was irritable at times but never abnormally so. He was a heavy smoker and a moderately heavy beer drinker. His work record and period of national service had always been satisfactory. In his early twenties he married a girl of 18 who left him after 4 months. Shortly afterwards he met an Irish girl who was temperamentally more suitable. While courting her he was very jealous and he placed great importance on the physical aspects of their relationship. Their first child was born after two years and the patient then left home during the war to undertake military duties. In his absence the girl was seduced by the patient's father by whom she had another child. The patient was deeply distressed by this event at the time of his discharge from the navy. He nevertheless returned to the girl and married her in 1948. Two more children were born, one of them a very nervous child. There was no previous history of physical or mental illness.

About three years before he came to hospital the patient had begun to be pre-occupied by the relationship between his father and his wife. He began to speak of this more frequently and became so worried that he lost his job. After some weeks he appeared to have conquered these thoughts but he tended to brood on the matter from time to time and eventually began to question his wife repeatedly about the details of past events. He accused her of concealing information, struck her several times, then became very depressed, wept frequently and begged forgiveness. His appetite fell off and he began to sleep badly. He made two attempts to gas himself.

On admission he was in good general condition and showed no evidence of physical

disorder. He was wholly pre-occupied with his wife's misconduct, becoming increasingly anxious when this was discussed. He was depressed and at times agitated; he showed no evidence of disturbance of thinking or of perceptual anomalies. He admitted that he was unable to prevent himself from ruminating on past events though he realized that he was distressing himself. He did not regard himself as ill. During his stay in hospital an attempt was made to treat the condition by regular psychotherapeutic interviews. In the course of these interviews the patient became anxious and depressed and on one occasion left the hospital and returned home to attack his wife after further questioning. Five days after his wife had a miscarriage and the patient returned to hospital voluntarily. His attitude to his wife fluctuated between murderous hostility and great remorse. He was discharged from hospital on 3.9.58.

Diagnosis: Obsessional neurosis.

Follow up: Psychotherapy was continued on an out-patient basis and some months after discharge he was regarded as being slightly improved. He declared at this time that he was able to control his thoughts unaided.

Case 59

Mr. E.J., *aet.* 55, was seen at his wife's request as an out-patient on 11.1.55. He came from a working-class background, the eldest of five siblings; there was no family history of nervous or mental illness. He had always been a hard-working, popular person, tending to self-righteousness; he was a perfectionist and a worrier over trifles, sensitive to other people's opinions but often tending to animadvert their disdemeanours. He had a good work record. He was a moderate beer drinker. The patient married after a long courtship at the age of 26. He had had no previous sexual experience; the marriage was happy, sexual relations were satisfactory and neither spouse had been unfaithful; there was one child *aet.* 4. The patient had suffered no serious illnesses but had often developed somatic symptoms of anxiety in stressful situations.

Three years earlier, the patient had noticed that his wife's stockings were torn on one occasion; he became very upset and wondered whether she had been assaulted; he was not reassured for some weeks. One year before he was seen the patient's wife had begun work in a factory and her physical energy declined; sexual relations consequently became less frequent. After some weeks the patient began to complain of her coldness and he looked increasingly depressed; he complained of pains in the chest, became moody, began to sleep poorly and appeared to be brooding. After several months he suddenly began to accuse his wife of infidelity, supporting his statements by reference to stains on the lining of her coat, a handkerchief which he thought was discoloured and the drawn curtains in the bedroom. He told his wife that he was convinced of her infidelity but that he would forgive her if she would confess that she had been compelled to act in this way. After a long period of abstinence he drank a large quantity of beer and then came home to accuse her incessantly for several hours. His wife took his accusations seriously and became very upset. Eventually, in order to demonstrate her innocence, she cut her wrists with a razor blade and on this account she was removed to an observation unit. In hospital the nature of the marital difficulties was elicited. She was released after a few days, her depressive reaction having cleared up.

On examination the patient was mildly depressed and admitted that he had been wholly mistaken in his suspicions. He stated that he had realized the absurdity of his suspicions as soon as his wife made her suicidal gesture. He appeared very contrite. There was no evidence of other delusions or morbid ideas.

Diagnosis: Depressive reaction.

Follow up: It was not possible to obtain further information about this patient.

Case 60

Mr. A.E.C., *aet.* 38, bus conductor, was brought to psychiatric attention following the admission of his wife to an observation unit on 21.5.58 after she had made a suicidal attempt. This had occurred at the end of a period of marital disagreement following the discovery that she was pregnant for the fifth time. The patient had maintained that the child was not his and a series of quarrels had begun. The domestic strains combined with the worry of an unwanted pregnancy had contributed to the wife's depressive reaction. She made a rapid recovery in hospital, but the opportunity was taken to interview the husband before her discharge.

He came from a working-class background with poverty and unhappiness dominating his childhood. There was no history of mental or nervous illness in the family. The patient had always been the misfit of the family and was regarded as a "black sheep". At the age of 9 he had left home to live with a motherly lady who befriended him. He spent fifteen satisfactory years in the Royal Navy but was less settled after his discharge. He was a moderate beer drinker. He married at the age of 22, having known his wife since the age of 16; from the commencement of their marriage he had been excessively possessive and jealous; after each of her pregnancies he had accused her of misconduct, usually with one of his brothers who had been interested in her before their marriage; their sexual relations were satisfactory and there had been no infidelity on the part of either spouse.

For two or three years before he was seen the patient had been consulting his general practitioner because of feelings of tension, depression and insomnia. These symptoms were

closely related to his marital difficulties; he had been advised to seek psychiatric help, but had refused until his wife's admission. On several occasions he had struck his wife but had felt very guilty afterwards; they had separated for short periods of time on three occasions.

On examination he was a depressed, anxious-looking man with a good grasp of the situation. He admitted freely that there were no real grounds for his suspicions and that he was, in his own words, "a jealous, stupid man to think of these things"; at the same time he referred to a number of trivial incidents which, he admitted, troubled him constantly and led him to recurrent paroxysms of jealous anger which he was unable to resist. He also admitted that he found it difficult to cope with his wife's relative maturity which made him feel like "a little boy". He found the guilty reactions which he underwent very depressing and confessed to wondering whether a separation would not be better for his wife.

Diagnosis: Depressive reaction in an immature personality.

Follow up: The patient and his wife were both offered supportive therapy on an out-patient basis. The domestic situation remained precarious during the ensuing six months in which the problems were discussed.

Case 61

Mr. F.J.J.M., *aet.* 45, lathe operator, was admitted to hospital on 21.6.58, from prison on a probation order. He had been charged with being in possession of an offensive weapon without lawful authority or reasonable excuse and he stated that he would have used a carving knife against his wife had he not been apprehended.

He came from a poor, working-class background; his birth and early development were normal. He had suffered an attack of poliomyelitis at the age of 4 with paralysis of the left leg; a long period in hospital had necessitated his missing school for some years. There was no history of nervous or mental illness in the family. He had always been a quiet, solitary and introspective person; outside work his principal interest was in second-hand cars. His work record had been good but he had never mixed easily with his work-mates. He was a teetotaller. He married at the age of 20; sexual relations were unsatisfactory but there was no infidelity on the part of either spouse; there were three children, aged 6, 13 and 15. The marriage was unhappy; the wife was a mentally unstable woman who had been admitted to a mental hospital on three occasions with a diagnosis of schizophrenia with marked paranoid features; she had made one serious attempt to take her life and while in hospital had expressed paranoid delusional ideas about her environment and her husband. There had been apparently a full recovery from these illnesses on each occasion. She had also been placed on probation twice for pilfering. The patient had contracted tuberculosis and had undergone a thoracoplasty at the age of 41.

The marital situation had been deteriorating steadily over a number of years. In the course of her psychotic illnesses the patient's wife had often accused her husband of infidelity. During their numerous quarrels he had referred to her previous misdemeanonrs but he had never accused her of infidelity. Since 1955 both husband and wife had been to see the probation officer about the marriage. The wife's complaint was that the patient was constantly grumbling; the patient stated that his wife was accusing him of infidelity and would not leave him alone. Relations deteriorated further and there were three short separations. A few weeks before admission to hospital the patient's tolerance had become increasingly strained and following a particularly serious quarrel he stated that he had lain in wait for his wife with a carving knife; before her arrival he had asked his daughter to call the police. He was taken to prison and appeared before a magistrate who put him on probation on condition that he received psychiatric treatment.

On examination in hospital he was a gaunt, serious man; physically there was evidence of the old right thoracoplasty and severe wasting and weakness of the left leg. He was anxious and pre-occupied with his hostile feelings against his wife who, he stated, had turned the neighbours against him by her accusations, particularly concerning his supposed sexual misconduct. He stated that all he wanted was to be left alone and that she had been deliberately annoying him. There was no evidence of delusional ideas or of abnormalities in the sensorium. After some weeks in hospital he became calmer and he stated that he had begun to understand his wife's personality and psychiatric history for the first time. After further discussion he announced his intention of returning home, patching things up and continuing married life together with his wife. He left hospital on 25.10.58.

Diagnosis: Inadequate personality.

Follow up: Since his discharge the patient has continued working and despite difficulties with his wife at home he has continued to shoulder his domestic responsibilities.

Case 62

Mrs. G.B., *aet.* 52, housewife, was admitted to hospital on 31.10.55, from the out-patient department. She came from a working-class background; one sister was said to have had a neurotic illness in early adult life. She was known as a pessimistic, querulous, hypochondriacal, mistrustful, self-centred woman. She drank alcohol very occasionally. She had been married for thirty years; she had had no children but there had been three miscarriages. The patient had been excessively demanding throughout the marriage which had been sustained largely

by the submissive nature of the husband; there had been frequent moves because of the patient's dissatisfaction; their sexual relations had always been difficult, but there had been no infidelity on the part of either partner. About four years after they were married the patient had accused her husband of infidelity without reason and continued to do so for some weeks; she later admitted that her suspicions were unfounded; the husband had always had to be careful of his behaviour towards other women because of the patient's watchful attitude.

On two occasions, in 1926 and 1934, the patient suffered two episodes of "neurasthenia" with multiple somatic complaints. She had a history of peptic ulcer and some menstrual irregularity prior to admission.

Three months before admission the patient began to become increasingly jealous and suspicious of her husband's behaviour. She alleged that he was being unfaithful and repeatedly questioned him; her accusations continued throughout the day and long into the night. After some weeks she attacked him one evening after a particularly fierce quarrel. She then accused him of homosexual behaviour, citing minor events and observations as "proof". The husband became very depressed and after a short episode of hysterical dissociation he made a suicidal attempt and was admitted to a general hospital. On his release the patient accused him of trying to take his life because of his guilty feelings; she made increasing sexual demands and the husband was forced to ask his general practitioner for androgens. Eventually the patient became more aggressive towards the husband and threatened to kill him.

On examination in hospital the patient was at first unco-operative, claiming that she was not ill and expressing hostility towards her husband. She complained frequently of palpitations and agreed to remain in hospital only because she felt that she required physical investigation and treatment. She maintained at all times that her husband had been guilty of homosexual practices; she referred to the "evidence" of numerous details, e.g., the alteration in the disposition of objects on the dressing table, stains on her husband's underwear and on the carpets and cushions, the discovery of pubic hair on the sofa, the size of her husband's anal orifice when she examined this. She left hospital against medical advice on 18.11.55.

Diagnosis: Menopausal paranoid state.

Follow up: Within a few days of her discharge the patient's behaviour became so intolerable that the husband came up to hospital begging for her re-admission. When she was seen two months after her discharge the patient appeared to be more disturbed than before, making fantastic accusations against her husband and also accusing him of trying to drive her into insanity. At the time the husband found domestic life impossible and he left home; his departure distressed the patient very much. The husband had never found it easy to accept the fact that his wife's persistence in her beliefs about him could indicate mental illness since she appeared to be rational otherwise.

Despite her feelings about him the patient traced her husband through his job shortly afterwards and they resumed married life together. Twelve months later (eighteen months after discharge from hospital) they were still together; the patient had attended a gynaecological clinic complaining of a vaginal discharge and dyspareunia, but her mental state failed to attract attention at this time. The husband expressed his intention of continuing with the marriage though he described it as "walking on ice".

Case 63

Mr. G.A., *aet.* 46, warehouseman, was first seen in the out-patient department in June, 1954. He was the fifth child of a working-class family in which there was no history of nervous or mental illness. From early childhood he had been known as nervous and apprehensive. He suffered from renal disease in his teens and was exempted from military service in consequence. His work record had been adequate though he had never succeeded in making much money. He was an anxious man who had been a heavy beer drinker most of his adult life and had ill-treated other people when in his cups. He was married at the age of 23 to a reliable, maternally inclined woman on whom he became wholly dependent. His wife also suffered from renal disease and underwent a nephrectomy shortly after their marriage; during her absence in hospital the patient became extremely depressed, neglected himself and appeared to be quite helpless. In spite of strained financial circumstances they had nine children but in 1950 the patient's wife was sterilized, an event which upset him very much. The marriage had been satisfactory on the whole though the patient had always been of a jealous disposition. Neither partner had been unfaithful.

A few months before the consultation the patient's wife had undergone an operation following the perforation of a peptic ulcer. During her stay in hospital the patient again became very apprehensive, depressed and self-neglectful. His work suffered and it was necessary for his general practitioner to prescribe hypnotics.

On examination he was a small, thin man with signs of early rickets. He was overtly anxious, worried and depressed. He admitted freely to his incapacity to manage his affairs without the help of his wife. There were no signs of major psychiatric symptoms at this time and he was seen on only the one occasion when he was reassured, given a mild sedative and advised to take a holiday.

Diagnosis: Anxiety state.

Follow up: Four months after the initial consultation the patient was admitted to a mental hospital where a diagnosis of a paranoid state was made. He was admitted on a 3-day order in December, 1954 expressing ideas about his wife's infidelity and denying the paternity of two of his children. He stated that he had been suspicious about his wife for many years and that he had noticed a change in her face which was attributable to her misconduct. He commented on stains in the bed and evidence of blood to which he attached great significance. He had accused his wife of misconduct with the greengrocer and he was of the opinion that she was trying to poison him with a powder which he could smell on his handkerchiefs and taste in his cigarettes. He admitted that his potency had been waning in the last few months and he thought that this might be an effect of the poison. After a few days in hospital his condition improved and he discharged himself against medical advice.

One year later he was re-admitted to hospital under certificate, having caused difficulties at home because of his morbid ideas about his wife's infidelity. These had now spread to include members of the family with whom he accused her of committing incest and he doubted the paternity of all his children. He was not hallucinated. All interviews were dominated by his garrulous development of the theme of his wife's infidelity. He again improved quickly in hospital and within a month stated that his ideas were without foundation. His wife expressed herself as willing to take him home.

He was next admitted to hospital two and a half years later as a voluntary patient following further disturbance at home. His ideas about his wife had quickly recurred. He had separated from her for short periods and refused to pay maintenance in spite of a Court Order. This time he stayed in hospital for only a few days and then discharged himself against medical advice.

He returned to live with his wife over the next few months but had to be re-admitted under certificate in January, 1960 when his ideas were held as firmly as ever. Before admission on this occasion he had withheld permission for one of his children's marriage on the grounds that he was not the father and could not therefore give permission. Once more a firm diagnosis of paranoid schizophrenia was made but within two months in hospital he again stated that his ideas were probably mistaken. His wife behaved with patience and solicitude and was ready to take him back against medical advice in April, 1960. At no time had she fully appreciated the morbid nature of his ideas.

Case 64

Mr. A.L.J.S., *aet.* 35, chauffeur, was seen as an out-patient in July, 1955 on the advice of a general physician to whom he had been referred by a solicitor. He came from a working-class background. There was no family history of mental illness. He had always been a quiet, shy, worrying person with few friends. His work record was good. He was a teetotaller. The patient had been happily married for fourteen years; the sexual relationship had been satisfactory and neither partner had been unfaithful; there were two children, *aet.* 12 and 11. There was no past history of nervous illness or of serious physical disease.

The patient's psychiatric illness commenced seven or eight weeks before the consultation when he began to entertain ideas about his wife's misconduct based on circumstantial evidence. He consulted his solicitor to whom he stated that his wife often came home in the early hours of the morning, that she had been seen in the other man's company and that he had found a partly burnt condom in the fireplace. His story was sufficiently convincing to have induced the solicitor to have the wife followed by a private investigator but after three weeks the solicitor became convinced that the patient was mentally unwell because he began to express views which were patently abnormal. He suggested, for example, that his wife's lover was coming into his bedroom at night and that his wife was drugging him to make his sleep soundly. A general physician was also convinced of his mental abnormality and referred him for a psychiatric opinion.

On examination he expressed a number of delusional beliefs concerning his wife's infidelity. He stated that he had found "knee marks" which indicated misconduct on the seat of his car and he asserted that some of the stains on the leather were of seminal origin. He speculated on whether his children had been involved in some way and stated that he had felt affected by some substance which his wife had been giving to him. He also stated that his letters were soaked in urine. He was not violent towards his wife at any time. His wife stated that he was very depressed at home, sleeping poorly, eating little and crying at times; there was no loss of libido. The wife was a stolid, powerful woman who scoffed at his suspicions.

Diagnosis: Paranoid state.

Follow up: The patient was seen three weeks later in the company of his wife. At this time his wife stated that he was "his old self" and had ceased to accuse her of misconduct. The patient, while holding to some of his former statements, claimed that he might have been mistaken. No further contact was possible.

Case 65

Mr. W.F.R., *aet.* 44, flusher, was referred to the hospital out-patient department in August, 1958, by his general practitioner at the insistence of his wife. He was the oldest of four children from a working-class background. One brother had committed suicide following the death of his wife in an air-raid; otherwise there was no family history of nervous or mental illness and the family was united and contented. The patient left school at the age of 15 after

an undistinguished scholastic record and took a job in an aircraft factory which exempted him from national service. He eventually took a post with the borough council, working for some years as a flusher in the sewers. His personality had been that of a shy person who had kept to himself and made few friends; he was aware of his low educational status and was very self-conscious about the loss of an eye in an accident during his late teens. He drank very little alcohol. He was married *aet.* 24 to a woman some five years younger than he who came from a higher social group and who was a friendly, sociable and attractive person. There were two children *aet.* 17 and 14; the elder child, a girl, was engaged to be married a few days after the consultation. The marriage had not been a happy one from the start. There was considerable incompatability between the two partners and the patient's sense of inferiority was very marked. Five years before the consultation the patient's wife had formed an association with a neighbour but she confessed to this after some months; the patient went to see the man whom he advised to remain with his own wife. The patient had never been unfaithful. Throughout their married life he had been very jealous and from time to time, but especially since the affaire, he had followed his wife and accused her of misconduct. He was sexually importunate and refused to employ contraceptives; the wife had had four miscarriages during the previous five years. From time to time he demanded anal intercourse against his wife's will. His previous physical health had been adequate apart from the accident to his right eye; there was no history of previous nervous or mental illness.

Some three weeks before the consultation the patient learnt indirectly that his wife had been seeing her former man-friend. When he confronted his wife with this information she became very angry, denied the allegations and declared her intention of leaving her husband. The whole previous history of marital discord was thereby raked up and exacerbated. The patient became more insistent than ever in his beliefs and fears of misconduct. The wife had been in the habit of going to a dance every week and he began to follow her, refusing to leave her side; he began to wonder whether he might harm her or himself. Eventually she went to their general practitioner who persuaded the patient to seek a medical opinion.

On examination the patient was a small, tense man, loquacious and resentful. He was mildly depressed and anxious to justify his point of view. He was fearful lest his wife should leave him but he displayed no real understanding of the marital situation. He admitted that he had often had ". . . a sinking feeling which simply means I'm jealous". He admitted that his wife was more able than he and that she excelled in such activities as dancing in which he was unable to indulge. His wife was also seen and confirmed the long history of jealousy which had made things difficult for them from the very beginning. She felt that she was at the end of her tether but was prepared to continue with the marriage as long as the patient restrained himself.

Diagnosis: No psychiatric abnormality.
The patient did not attend again.

Case 66

Mr. R.T.F., *aet.* 42, turner, was admitted to hospital from the out-patient department on 25.6.56. He came from a closely-knit working-class background. The patient was the second of six siblings; there was no history of family mental or nervous illness. He had been regarded as the "black sheep" of the family, an independent and solitary person, self-conscious, ambitious but with high moral standards; he was generally cheerful but had always been irritable and jealous on the subject of his wife. His work record was adequate; he drank alcohol rarely. He was married *aet.* 23, sexual relations were satisfactory and he had three children *aet.* 18, 14 and 16; there had been no infidelity on the part of either spouse. The patient suffered from a duodenal ulcer for a short time when he was *aet.* 27.

About ten years before admission and after nine years of happily married life the patient began to develop bouts of depression, accompanied by worries about his wife's misconduct. There was no apparent precipitating factor. At these times he displayed evidence of irritability, anorexia, insomnia, restlessness and agitation; he also accused his wife of infidelity. At first these episodes occurred only once a year, lasting for a few days; over the next ten years the attacks became more frequent and lasted up to two weeks. During the attacks he would pick on his wife and misrepresent her actions though he rarely confronted her with his accusations directly; he had lost his temper from time to time but though he threatened her occasionally he had struck her on only two occasions. Following an attack he would become remorseful and promise that there would be no recurrence. Two weeks before admission he had become very depressed, refusing to go to work, eating and sleeping little; he said his looks were fading; he accused his wife of infidelity and suggested that she went about half naked and wore her brassière in an unusual manner. His wife went to stay with a relative and told him that she would return only when he had received medical attention. He then became very remorseful and entertained suicidal ideas.

On examination in hospital he was at first patently depressed, crying frequently and stating that he was worthless and in need of punishment. He explained that the thoughts about his wife's infidelity had recurred every few days and that he was unable to banish them from his mind. At the height of these episodes he stated that he was convinced that his wife had been unfaithful though most of the time he knew that his suspicions were unjustified. He admitted to having entertained suicidal thoughts; he also stated that he had at times been jealous of his eldest son. He denied any wish for a confession from his wife; he had never

inspected her clothes or followed her about. He stated that he was very much in love with her. There was no evidence of other morbid ideas and no anomalies of the sensorium. Within a week he had lost his depressive symptoms and was anxious to return to work. He admitted that he had given too much time to his work but he stated that his wife might have been more patient with him though he took full responsibility for his unreasonable behaviour. He expressed the opinion that he was in some way inferior to his wife and he had observed that his symptoms became worse when his wife was unruffled by his behaviour. He was discharged on 25.6.56.

Diagnosis: Depressive reaction (episodic).

Case 67

Mr. F.H.L., *aet.* 50, maintenance man, was seen on a domiciliary visit on 3.3.55. He came from a working-class background; his parents were first cousins. The father was an abnormally jealous man, one paternal uncle had committed suicide, another had suffered from an unspecified mental illness; the family considered both men to have become mentally ill because of their jealous temperaments. The patient was known as a hard-working, conscientious man, meticulous about every aspect of his activities, cautious with money, suspicious of almost everybody with whom he came in contact. His work record was satisfactory; he drank alcohol very occasionally. His marriage had continued for twenty-five years without serious upset because of his wife's submissive nature; there were two children, *aet.* 21 and 18; sexual relations had been satisfactory and neither partner had been unfaithful. There was no history of significant illness.

The patient had exhibited morbidly jealous traits all his life. Examples of his behaviour included a reluctance to permit his wife to speak to members of the family, to have women friends or to allow even adolescent boys in the house. He had always timed her stay at parties and frequently examined her underclothes when he accused her of infidelity. He was overtly jealous of his elder child's fiancée. The patient had also displayed phobic symptoms for years and had left one good job in his forties because of difficulties with travel. His new post was less remunerative and his wife was compelled to go out to work. From this time his jealousy became more troublesome and he accused her of misconduct at work frequently; he had struck her often and there was talk of separation many times. The marital situation deteriorated and the patient became increasingly depressed; he began to sleep badly, to lose weight and to eat very little. At no time had he exhibited delusional ideas and he had stated frequently that he did not believe in his accusations but that he could not help making them. He was usually remorseful afterwards. Two months before the consultation he had developed dyspnoea for which no cause had been discovered and he had since been unable to go to work, preferring to stay indoors or to go out only by himself as unobtrusively as possible. His wife continued at her job and resisted all his threats.

On examination the patient was very reserved, making it clear that he had little use for any form of intrusion. He minimized all his symptoms, but his perfectionist traits were apparent at the interview; his dyspnoea was, by his own admission, closely related to uncomfortable situations. He refused to admit to any degree of jealousy. The patient was offered admission to hospital, but refused.

Diagnosis: Anxiety state with phobic features; abnormal personality.

Follow up: Three months later his general practitioner reported that there had been no further complaints on the part of the patient or his wife. Two and a half years after his psychiatric consultation he developed thoracic symptoms which were diagnosed as those of a bronchogenic carcinoma. A pulmonary lobectomy was performed. in March, 1958.

Case 68

Mr. J.R., *aet.* 39, bus driver, was seen in the out-patient department on 1.3.55. He came from a working-class background, the youngest of four siblings. There was no history of nervous or mental illness in the family. Outside the family circle he was known as a pleasant sociable man; to his dependants he had presented a different face, tending to dominate and to sulk if contradicted; he had always been jealous and moody. His work record and service history were satisfactory. He was a moderate week-end drinker. He had been married for fifteen years and had two children, *aet.* 12 and 11. The patient and his wife had both had previous sexual experiences which they had discussed fully; their sexual relations had always been satisfactory; neither partner had been unfaithful. The patient had suffered no previous physical illness or mental disability of any consequence.

Throughout married life there had been difficulties in the relationship; the wife was a determined, open-minded person who had always found the patient's attitude towards her irritating even though her affection for him did not waver. He very rarely accused her outright of infidelity but would make insinuations which led to frequent quarrels. The wife met the situation by refusing to be dominated; she began to work as a waitress and as a barmaid, having worked in both capacities before marriage. The patient constantly tried to keep her at home, "out of temptation". In 1949 he had refused to let her go out in the company of her own mother who was co-habiting with another man at the time and who, he maintained, would lead her into bad habits; the wife objected to his dictates and they separated for a year;

during this time the wife made contact again with a former boy friend but denied that physical relations had taken place. A reconciliation was effected on the initiation of the wife. On three subsequent occasions the marital relations had become so strained as to have led to assaults. Once the patient attacked a man who, he thought, had seemed unduly friendly towards his wife while she was serving as a waitress; on a similar pretext he attacked his wife and broke a tooth, which led to a charge against him and a visit from a probation officer; he struck her again on a third occasion but no charge was preferred. During the six months before he was seen at hospital he had complained of pains in the stomach and back and his feelings of jealousy had become more troublesome.

On examination the patient appeared anxious and mildly depressed. He explained that he was well aware of the morbid quality of his jealous ideas, stating that he knew she had never been unfaithful to him since marriage but that he could not prevent himself from brooding on the possibility that she might betray him. "At the back of my mind," he stated, "I don't suppose I ever forgave her for being seduced by another man." The patient denied having any morbid ideas and there was no evidence of delusional thinking or of depressive personality traits. It was not considered that the patient's outlook could be modified but the implications of his behaviour were discussed fully with the wife.

Diagnosis: Abnormal personality.

Case 69

Mr. J.L., *aet.* 34, manufacturer, was admitted to hospital on 17.12.58. He came from a very poor Jewish background. His father had suffered from a number of depressive episodes for which he had been treated with out-patient E.C.T.; his mother had been in several mental hospitals with a recurrent mental illness. The patient was the second of four siblings, one of whom had been treated for a nervous illness in the past. There was no other family history of nervous or mental disease. He had always been a quiet, serious person who did well at school and had then worked very hard to improve his material position. He was successful in his business and was generally cheerful though he was sensitive to criticism, self-conscious, anxious to assert himself and very jealous of competition; he was subject to episodes of depression and irritability at times. He was moderate in his habits and consumed very little alcohol. At the age of 24 he married a Jewish girl whom he had known for some months as his employee. His wife worked with him for several years building up the business and during this time the marriage was happy in spite of sexual incompatibility; the patient had been unfaithful to his wife occasionally but she had never upbraided him or behaved in a similar manner. There was one child *aet.* 6 to whom the parents were devoted. Physically the patient had been regarded as a feeble child but he had never suffered a serious illness. He had exhibited a persistent stutter since the age of 9. At the age of 19 he had developed a transient nervous reaction following heavy air raids.

About three years before his admission to hospital the marital relationship had begun to deteriorate. The patient became interested in another woman and he insisted that his wife's appearance should be improved by a plastic operation on her nose. The wife underwent the operation and shortly afterwards she contracted a short-lived, innocent relationship with a Jamaican. The patient's paramour informed him untruthfully that his wife was deceiving him with the Jamaican and he became unable to rid himself of this idea. He began to torment her at home and often struck her; he made excessive sexual demands and frequently referred to her abasement at the hands of a coloured person. A year before the patient's admission the wife had been driven to make a suicidal attempt with gas which was detected before serious effects had resulted. After a brief period of contrition the patient resumed his accusations. The wife consulted a probation officer on several occasions and also a solicitor before seeking medical advice. After both she and her husband had been interviewed his admission was recommended.

On admission the patient was a presentable, meticulously turned-out little man who was moderately depressed at having to stay in hospital but otherwise composed. He soon began to worry about his wife's possible misconduct in his absence and her visits were sufficient to stir up his ruminations; on these occasions he lingered over his suspicions and indulged in visual reconstruction of imaginary scenes though he admitted that there was no evidence to support his ideas and that it was most improbable that his wife could ever have been unfaithful to him. An attempt was made to get him to work from hospital and to see his wife infrequently for some weeks. At the same time psychotherapy was undertaken with both the husband and his wife in an attempt to reconcile some of their differences. It became apparent, however, that his wife had begun to appreciate the strength of her own position; as her feelings towards the patient waned she indulged in deliberate provocation and taunted him with his own suspicions in order to inflict suffering on him. At the time of his discharge from hospital on 27.3.59 it was not felt that the marriage would survive much longer but neither the patient nor his wife would agree to live apart for a trial period.

Diagnosis: Abnormal personality with depression.

Follow up: Four months after discharge the wife decided that she could not tolerate domestic life any longer and approached a solicitor for legal advice concerning a separation.

Case 70

Mr. A.A.C., *aet.* 36, unemployed, was admitted to hospital on 28.8.58, having been referred to the out-patient department by the probation officer. He came from a lower middle-class background, the oldest of three siblings. The father had been an ex-stage comedian, a temperamental, unpredictable man who was frequently violent towards the mother; none the less, the home was relatively stable and the patient's childhood was a happy one. He did well at school and then served an apprenticeship as a toolmaker; following his training he took a number of engineering jobs as a skilled worker and his work record was excellent until the onset of his illness. He had been a cheerful, energetic man, gregarious, occasionally aggressive and quick tempered but popular and with many friends. He drank very little alcohol. He was married at the age of 24 to a woman two years older than he. The patient had little previous sexual experience but his wife had formerly lived with several men and he was upset to learn of these affaires when he met her first. They had three children *aet.* 11, 8 and 3. The marital history is closely connected with the history of the illness (see below). There had been no previous illness of significance.

The marriage had been satisfactory at first but the wife made it clear from the outset that she wished to continue working. Two years after they were married she began an affaire with her employer and confessed her lapse to the patient shortly afterwards. From this time he became dominated by ideas connected with her infidelity and previous sexual activities. The wife reacted to his questions and accusations by feeding him with stories which were calculated to arouse his jealous reactions even more. She insisted on continuing her work and formed the habit of falling asleep in the early evenings, claiming that she was exhausted. The patient became extremely angry at this behaviour although he never struck her or became violent. For several years he nursed a great resentment against her and during this time he developed an insomnia which, he claimed, prevented him from sleeping at night and from getting up in the morning. The insomnia was closely related to difficulties at home and it resulted in a deterioration of his work record and eventually to financial embarrassment. The marital quarrels increased in frequency and were usually terminated by the patient falling asleep. At length he consulted the police about his wife and was referred by them to a probation officer who advised him to seek a psychiatric opinion.

On examination in hospital he was a physically well-developed man who settled into hospital life very well and was pleasant and co-operative throughout. There were no overt abnormalities in hospital. His intelligence quotient was over 120. The nature of his symptoms was discussed with him in psychodynamic terms and he agreed with the interpretations given but felt quite unable to modify his conduct or his feelings. The wife was also interviewed in hospital and it was apparent that she too displayed morbid personality traits of such severity as to make it impossible to expect useful co-operation from her. The pattern of reaction appeared to be one of mutual provocation with both parties deriving some gratification from the jealousy displayed by the patient. In these circumstances it was felt that further treatment was not possible and the patient was discharged home on 19.9.58.

Diagnosis: Character neurosis.

Follow up: The patient attended the out-patient department and later joined a therapeutic group in which he spoke freely of his personal difficulties. He had remained symptomatically unchanged, nine months after his discharge.

Case 71

Mr. C.R., *aet.* 24, packer, was seen in the out-patient department in October, 1959, having himself requested that he be referred to a psychiatrist. He came from a working-class family, the oldest of four siblings. The family had been happy and united and there was no history of nervous or mental illness. The patient's early years had been uneventful; his school record was average and subsequently he held a number of jobs for short periods; he was rejected for military service on medical grounds which were unspecified. The patient was known to his friends as a friendly and cheerful person but the members of his family regarded him as shy and fearful of other people, especially of women and girls; he had always lacked self-confidence and was indecisive and easily frightened by physical violence though he had a quick temper; his energy output was poor. His first girl friend took little notice of him and for a year or two he drank very heavily in consequence. His wife had known him for about one year before their marriage in July, 1949, three months before the consultation. She was a divorcée whose first marriage had been unhappy from the start; there was one child *aet.* 8 of this marriage. After separating from her first husband the wife had known a number of men, with some of whom she had had affaires. She was a quick-tempered woman, with an independent spirit. The patient had suffered no previous illness of significance.

Almost as soon as he met his wife the patient began to raise difficulties because of the men she had known. On these occasions he would become angry but his accusations were met by taunts concerning his own inadequacy and detailed accounts of the physical aspects of previous relationships. The wife admitted that her lovers had always been jealous and that she derived some pleasure from provoking them. Nevertheless, he decided in favour of marriage but then became still more suspicious of his wife's conduct. She insisted on continuing with her job and he often followed her to work in the mornings to see whether she met anyone on the way. At times he would look through her belongings to find some evidence of her infidelity.

As she had a gynaecological condition which made it impossible for her to conceive he tormented himself with the thought that she could indulge the more freely in sexual misconduct. A month before the consultation the patient had tried to smother his wife with a cushion in the course of a particularly fierce argument; he then tried to gas himself and later went to the police who advised him to see a doctor. It was his hope on coming to the hospital that the marriage could be saved.

On examination he was a quiet, anxious man who showed no evidence of physical disease. There were no overt, psychiatric abnormalities on examination apart from his obvious distress when discussing recent events. He stated that he could not continue in his state of mind as his work was suffering as well as his marriage. He admitted that he was "eaten away with jealousy over nothing at all". He appreciated that his wife's sexual adventures had occurred before he had married her and that there were no real grounds for his suspicions.

Diagnosis: Immature personality.

Case 72

Mr. T.N., *aet.* 50, was tried for the murder of his wife in June, 1955. He came from a working-class London family. One brother had been an in-patient suffering from a schizophrenic illness for twenty years. A paternal uncle died in a mental hospital after thirty years suffering from a long-standing illness characterized by depression, hypochondriasis, auditory hallucinosis and later by paranoid beliefs. The patient's early life was uneventful. His pre-morbid personality was described by a relative as that of ". . . a cheerful, person in the normal way: always laughing and joking. He was even-tempered, kind and generous—would give away his last penny. He has never been lonely but has plenty of friends. He was fond of his home and children, tried to help his wife and enjoyed doing the garden". He had always worked as a street hawker. He had never drunk much alcohol. He was married at the age of 19, his wife being two years younger; the marriage was said to have been happy for some years, both partners being fond of each other and rarely quarrelling; there were six children. His physical health had always been good.

In 1947, when he was 41 years of age, he became depressed and moody for about a month, worrying about litigation concerning the property rights of a piece of land. In 1950, when he was 44, he was admitted to a metropolitan observation unit following a suicidal attempt. His wife stated at the time that he had been depressed for about three months following his mother's death; he was still worrying about the litigation. In the observation ward he was described as "depressed and anxious. Has some paranoid ideas of various people who either disliked or hated him. He talks of ideas of reference in relation to the time before admission. None since." A diagnosis was made of a "Depressive state in a paranoid individual". The patient was transferred to a mental hospital on a voluntary basis but stayed for only ten days, discharging himself against advice with the support of his wife. He was thought to have recovered by the time he left hospital where the diagnosis was of "depression of a mixed type with endogenous and reactive features".

In March, 1955, he was admitted to Brixton Prison on a charge of murder, having pushed his wife downstairs with fatal consequences. He was tried in June, 1955, found guilty but insane and transferred to Broadmoor where he was interviewed in August, 1955. He was able to give a good account of himself and of events leading up to the crime. He stated that he had been worrying about his health for several months and had been out of work for about a year. He worried particularly about his stomach, complaining of acid regurgitation, and about his waning libido. During this period he had become convinced of his wife's infidelity In evidence of her misconduct he stated that he had become aware of his wife's vaginal slackness during intercourse; that the tea which his wife had given him had an unusual taste and that some white sleeping tablets were being added to it; that he had found a pearl ear-ring and bits of curtain in a dug-out; that he had found his wife washing herself at an unusually early hour of the morning; that he had found his backdoor unlocked when he felt certain that he had bolted it; that an old man had picked up a blue frock which belonged to his wife and that his wife had been going out secretly at night. He had struck his wife on only one occasion, so he maintained, before the crime. On the morning of the crime he claimed that he had seen his wife waving a handkerchief at someone who was waving back. He said that his wife had then told him to mind his own business, ran downstairs and struck her head in the process. His attitude to recent events was calm and almost indifferent. He claimed that he still loved his wife and that he had himself to blame for not taking her out often enough. He believed that most people thought him innocent. He was worried only by the failure of his family to visit him in Broadmoor.

Case 73

Mr. R.P., *aet.* 44, labourer, was admitted to an observation unit on 9.11.52. He came from a working-class background, the younger of two siblings who were the only survivors of eight children. There was no family history of nervous or mental illness. He was known as a friendly, active devout Catholic, thrifty, neither suspicious nor jealous. He had a good work and army record. He was an erratic social beer-drinker only who was rarely intoxicated. At the age of 33 he had married a woman three years older than himself; there were no children; sexual relations had been satisfactory and neither spouse had been unfaithful. The patient

had suffered no serious physical illnesses but there was an obscure history of an operation on his head when he was *aet.* 20.

Aet. 31 the patient had been imprisoned for three years for having stabbed a girl because he believed she was having sexual relations with her brother. This girl had been the only female in whom he had been interested before his marriage and she had been his fiancée for years. For some days before the stabbing incident the patient had appeared to be depressed and wrapped up in his own thoughts; he had never accused the girl in public before his assault but he admitted afterwards that he had heard voices which confirmed his suspicions. On his release from jail where he had been a model prisoner the patient had once publicly accused his ex-fiancée's brother of misconduct but he never referred to this event afterwards. One year before admission he had complained of severe abdominal pains and had consulted a doctor on this account.

A few days before admission the patient was noticed to have changed in his demeanour and behaviour. He quarrelled with a colleague at work, complained of headache, ate little, slept poorly and appeared to be depressed. He confided to his priest that he was worrying about his wife's misconduct with her brother; when he accused his wife of incest she was indignant and ejected him from the house. On leaving home that night he had drunk more alcohol than usual. Two days later when the wife returned home she found that the patient had damaged the furniture and crockery and was tearing up all her photographs with a knife. He had hidden a knife in the bed. She went at once to the police with whose help the patient was removed to an observation unit.

On examination the patient tended to minimize his symptoms. He stated that he knew his ideas to be fantastic but he did admit that he had entertained thoughts of his wife having had sexual relations with her brother and of having communicated with him by signs and signals, e.g., raised eyebrows or whistling. He had never caught them in the act but had stayed awake at night; he had noticed that his wife looked drawn and haggard because, he maintained, of her excessive indulgence in venery. There was no other psychiatric abnormality elicited while he was in hospital and within a day or two he refused to admit to any morbid ideas. His wife expressed willingness to have him back and he was discharged on 21.11.52.

Diagnosis: Alcoholic confusional state with paranoid delusions.

Follow up: Seven days after his discharge the patient attacked his wife and was committed to trial. No information could be obtained about the legal proceedings.

Case 74

Mr. R.G.W.C., *aet.* 33, unskilled labourer, was admitted to hospital on 2.8.58 after an emergency consultation two days before. He came from a working-class background, the seventh of nine siblings, one of whom had had a puerperal psychiatric illness while another had been subject to depressive episodes. He had always been easily jealous, showing minor obsessional traits and phobias. He had few friends; his school record was poor and was followed by a series of unskilled jobs which were changed frequently because of inefficiency; his military service in the Pioneer Corps was satisfactory. The patient drank alcohol only occasionally. He was married at the age of 23 to a girl seven years his junior; they had five children, *aet.* 9, 8, 7, 5 and 2, all of whom were in good health; the marriage had been happy on the whole; there had been no infidelity by either partner; there had been occasional quarrels when the patient became depressed. There was no history of serious physical illness in the past.

In 1956 the patient had become very worried by his unsatisfactory living conditions and by a group of difficult neighbours. One of the neighbours had suggested that his wife was misbehaving herself and the patient found it increasingly difficult to rid himself of suspicions about her. Always a jealous man, he began to accuse her frequently of misconduct and to point to unimportant incidents to support his statements. He became increasingly depressed and one afternoon he mistook a woman in the street for his wife and attacked her in error. He became very upset after this and spoke of suicide. Two days later he attacked his wife with a hammer. He was apprehended by the police and committed for trial; he was found not guilty of attempted murder but guilty of causing grievous bodily harm and was sentenced to 18 months' imprisonment. He served only 12 months of the sentence because of good conduct. Following his discharge marital relations were resumed satisfactorily until he ran into financial difficulties. He then became depressed once again but on this occasion he did not accuse his wife but blamed himself for having spoiled his life; he felt ashamed of being seen by the neighbours; his fears of travelling increased; he became more and more anxious about everyday events and was forced to give up his job.

On examination he was a small, asthenic man who displayed the stigmata of old rickets. Mentally he was anxious and frightened and of low intelligence (I.Q. 87). He found difficulty in self expression, complained constantly about the unreasonableness of his neighbours and colleagues and blamed them for having ruined his life. He felt that everyone knew about his past. He denied any mistrust of his wife's fidelity but admitted to having been jealous in the past. He remained in hospital for only a few days and then discharged himself against medical advice on 9.8.58.

Diagnosis: Anxiety reaction in an immature personality.

Follow up: Five days after discharging himself he was admitted to a day hospital where he remained for two months. Social work was undertaken in order to help his wife and to help

ameliorate living conditions but the patient did not respond to the efforts which were made to modify his outlook and at the time of his discharge he was still unhappy about his prospects although work had been found for him and his accommodation was improved.

Case 75

Mrs. L.G.F., *aet.* 34, housewife, was seen as an outpatient on 18.1.56. She was born in France and came from a middle-class background; there was no history of mental disease in the family. She was known to have been of a suspicious and jealous disposition all her life; she had been especially jealous of her sister in childhood; she had many superficial and short-lived acquaintances, but no close friends. She had led a promiscuous sex life since adolescence with little physical satisfaction; there had been one homosexual experience. She had always tended to drink excessively on social occasions. She had induced one abortion and been treated for a venereal infection following a pre-marital sexual adventure. She had been married for five years and had one child *aet.* twenty months to whom she showed little affection; there had been infidelity on the part of both partners since marriage.

Since her marriage the patient had behaved in an excessively jealous manner; she would, for example, follow her husband to the station to be certain that he boarded his train, quarrel with him if his tie were crumpled and smell his clothes for perfume on his return from work. There had been many quarrels because of her behaviour and attitude.

On examination the patient admitted her inability to control her suspicions though at the same time she stated that she knew them to be unfounded. There was no evidence of any associated delusions; she was not depressed; there were no perceptual anomalies.

Diagnosis: Personality disorder.

Follow up: Follow up was possible for only a few months by her general practitioner; in this time her symptoms remained unchanged.

Case 76

Mrs. C.P., *aet.* 37, housewife, was admitted to hospital on 12.3.55 following a domiciliary visit. She came from a middle-class family in Northern Ireland, the youngest of four sisters; there was no history of nervous or mental illness in the family. Though her mother died during her first year of life the patient was brought up capably by an aunt and her childhood was a very happy one. During her early years she had been an active, popular person, keen on games but disliking the academic side of school life. On leaving school at the age of 18 she led a pleasant, indolent life until her marriage and she had never had to work for a living. She had never claimed more than a few friends, most of them women; she was subject to mood swings, very sensitive and shy but not suspicious. She drank alcohol only occasionally but was a heavy smoker. She had married *aet.* 27 and shortly afterwards came with her husband to England where she was at once unhappy. There was one child of the marriage, a girl aged 18. The marriage had been happy at first; neither the patient nor her husband had been unfaithful. There was no history of serious physical illness.

In March, 1951, the patient had been referred for a psychiatric opinion and was seen once in the out-patient department of a general hospital. At the time she was complaining of feelings of depression and an inability to cope with her domestic responsibilities. She was regarded as suffering from a mild reactive depressive illness and the connection between her reaction and her nostalgia for her home was noted. She also admitted at the time that although she wanted another baby the thought of pregnancy so frightened her that she was considering the adoption of another child. In March, 1955, she was seen on a domiciliary visit by the same psychiatrist who had seen her four years earlier. At this time she was expressing ideas about her husband's infidelity and admitted to a fantastic series of morbid beliefs on the subject. A diagnosis of paranoia was made and admission to hospital was advised. It appeared that she had been suspicious of her husband's fidelity at intervals throughout their married life but duting the past year she had become certain of his guilt. She had followed him in the streets and had been through his clothes on many occasions; she had on occasion hidden herself in the boot of his car and claimed that she had heard him making love to another woman; she had maintained that her husband's clothes were stained with seminal fluid and that there was lipstick on his handkerchiefs. She also stated that her husband's attitude had changed towards her and that he had admitted his guilt. The relationship between them had deteriorated in consequence of her changed attitude.

On examination in hospital she was found to be poorly nourished with a rachitic deformation of the chest. There was no other evidence of physical disease. She was listless and fidgety and nodded her head frequently when talking. She appeared to be depressed for much of the time and was wholly taken up with her ideas about her husband's conduct. She admitted that some of her accusations might have been unfounded. She was treated with E.C.T., modified insulin and supportive psychotherapy without any change in her condition becoming manifest. While she was in hospital she stated that her physical feelings for her husband increased in intensity. It was suggested that many of her ideas about her husband's infidelity represented a projection of her own feelings in the same direction. She was discharged from hospital on 28.5.55 without any substantial change in her mental state.

Diagnosis: Hysterical psychoneurosis with paranoid features.

Follow up: The patient was seen at regular intervals in the out-patient department and it became clear gradually that her delusions were becoming more firmly held and were proliferating. She stated that her husband was having an affaire with a fictitious person and she maintained that she had discovered seminal stains on his socks, shoes and raincoat. She hired a private detective to have her husband followed. She attacked an innocent woman on one occasion and was fined. Quarrels between the two marital partners began to increase in frequency. In 1958 the husband applied for a divorce but even after their physical separation the patient continued to accuse her husband of misconduct and also of homosexual activities. Divorce proceedings were commenced in October, 1959; the application was eventually granted on the grounds of cruelty alone with a cross-petition by the patient on the same grounds. The following extracts of the legal proceedings were reported in 1960: "A charge that the wife had committed adultery with the co-respondent . . . was rejected, the co-respondent having been dismissed from the suit at the close of the evidence on the part of the husband, under section 5 of the Matrimonial Causes Act, 1950. The husband was ordered to pay the costs of the wife and of the co-respondent.

"The essence of the husband's case of cruelty against the wife was that, from about September, 1954 onwards she falsely accused him of carrying on with other women. She made these accusations incessantly, for hours at a time. She checked and kept a record of the daily mileage of the husband's car; she kept a list of 'phone numbers, and invented names of women with whom she said the husband was associating. On one occasion she told the husband she had been concealed in the boot of his car while he had been making love to a woman in the car. On another occasion she said that she had received a letter saying that one of the women the husband was carrying on with had a venereal disease. When the husband asked to see the letter, she was unable to produce it.

"In the spring of 1955 the wife was seen by a consultant psychiatrist . . . His diagnosis was that she was paranoid and suffered from delusions. She sincerely believed, contrary to the fact, that her husband was carrying on with other women. She knew, when she made these accusations, the nature and quality of her acts, in that she knew she was accusing her husband of having affairs with other women, but she did not know that she was doing wrong. She did not make the accusations in order to be cruel to her husband, but because she felt herself wronged by his unfaithfulness . . .

"After the wife's discharge from hospital, she soon renewed her accusations against her husband, suggesting that he had been carrying on with women while she was in hospital. Later the wife recanted, and admitted that her accusations were untrue, saying that some of them had been made to trick her husband. There was a legal presumption that a person was sane, so as to be responsible for his or her acts. The burden was on the wife to prove that she was in such a state of mind that either she did not know what she was doing or that she did not know that what she did was wrong. It was quite possible that in the autumn of 1954, and until her discharge from hospital in May, 1955, she did not know that in making these accusations against her husband she was doing what was wrong. After she had recanted, however, it was impossible to hold that she was not legally responsible for her actions. The husband's case of cruelty had accordingly been established.

"The wife's case against the husband which consisted essentially in the complaint that from 1955 onwards he had treated her with contempt and indifference, had also been made out".

Case 77

Mr. J.T.G., *aet.* 47, meat porter, was admitted to an observation unit on 14.9.56. He came from a working-class background; one sister was regarded as morbidly jealous by the rest of the family; there was no other history of mental disturbance in the family. He had been an obstinate, impatient man, always inclined to be jealous. He had never indulged excessively in alcohol and had a good work record. He had been married at the age of 27 years and had three children *aet.* 26, 24 and 10. He had displayed outbursts of jealousy throughout his married life and from time to time he had forced his wife to change her job; he had often kicked furniture about if she had come home late at times. There had been no infidelity on the part of either spouse. The patient had never suffered any serious physical illness or mental disorder in the past.

During the year before his admission to the observation unit the patient's jealous behaviour became more pronounced. He had accused his wife of unnatural offences, claiming that he had proof though he never specified what this might be. After his outbursts he would apologize, but six weeks before admission he had struck his wife for the first time and she had left him. He had made many more sexual demands on her during this year than for many years past. The wife decided not to return to live with him because of his behaviour and mentioned that she was contemplating a divorce. He became very depressed and made a suicidal attempt.

On examination the patient admitted to his morbid suspicions, though he denied that he had been wholly convinced of his wife's adultery at any time. He stated that he had brooded a lot about her conduct and that at times he was unable to prevent himself from coming to the conclusion that she had been unfaithful to him: it was then that he dwelt on incidents to which he attached significance and which led him on to entertain violent feelings against her. There were no associated delusional ideas or perceptual anomalies. He was discharged on 24.9.56 and seen as an out-patient on 16.10.56.

Diagnosis: Reactive depression in an abnormal personality.

Follow up: The patient's wife decided to proceed with the divorce which was granted ten months later on the grounds of cruelty. The cases was contested by the patient who maintained that he had never behaved in a cruel manner. He also stated in his defence that if his actions were to be interpreted as cruel then his wife had condoned them: further, he claimed that he could not be held responsible for them. The patient's counsel, however, conceded that he was responsible in law for his actions which were taken to be serious enough to warrant divorce on the grounds of cruelty.

Case 78

Mr. F.L., *aet.* 24, storeman, was referred to the out-patient department on 28.9.49. He came from a working-class background. One brother had been treated for psychiatric symptoms with morbid jealousy (see Case 28). There was no other history of psychiatric disorder in the family. He had been regarded as a sensitive, self-conscious, insecure and self-pitying man; his army and work records were adequate. He drank alcohol very rarely. His previous health had been good. The patient had been married for four months and had indulged in no pre-marital sexual relationships. Both partners were fond of each other but they were both dissatisfied with their living accommodation; further, the wife had displayed some frigidity and was worried about her ability to conceive. The patient had been growing suspicious of his wife's conduct and had become increasingly depressed.

On examination the patient appeared distressed and self-reproachful. He appreciated the fact that his accusations were without foundation but stated that he was unable to control his feelings about his wife; these feelings had been present during the engagement period. The wife appeared sympathetic and anxious to help. The patient and his wife were interviewed on several occasions and social work was directed towards obtaining better accommodation for them.

Diagnosis: Depressive reaction; vulnerable personality.

Follow up: Six years later the patient was interviewed again with his wife. They reported that the marriage had been very happy and that they had three children. The patient's feelings of jealousy had disappeared completely when he learnt that his wife was pregnant for the first time and had never returned.

Case 79

Mrs. L.M., *aet.* 34, housewife, was admitted to hospital on 16.12.59 after an out-patient consultation. She came from a working-class background, the eighth of a family of nine. There was no history of nervous or mental illness in the family. Her childhood was apparently a happy one in a pleasant, united home. Her early development was normal; her school record was average and on leaving at the age of 14 she held a few jobs before settling down for five years in a N.A.A.F.I. canteen. She had always been regarded as a cheerful person but she was known to be shy and to have only limited energy; she had smoked heavily since her teens but she was a teetotaller. She had known her husband for several years before her marriage at the age of 22; they had been engaged for one year and had had sexual intercourse during the engagement period; the patient had experienced no previous physical relationship. The husband was a wilful, obstinate man but though the marriage had never gone smoothly there had been no obvious difficulties until the onset of the illness. There were four children, *aet.* 11, 9, 7 and 4. Neither partner had been unfaithful (see below). The patient had suffered no previous physical or mental disability of significance.

Three years before her admission to hospital the patient's husband had taken another job which brought him more money and enabled him to travel more often. From this time the patient began to be convinced that he was carrying on an affaire with a woman in the neighbourhood; this woman had separated from her husband and was living with her parents and her little boy. The patient became depressed and tearful and lost interest in the upkeep of her home although she always remained devoted to the children. She began to complain of headaches which compelled her to take to her bed and led her to neglect her everyday tasks. The husband always denied the accusations although the patient claimed that originally he had admitted them. A year before admission the patient miscarried and her physical health suffered in consequence. Three months before admission she became pregnant again and this event further weakened her debilitated physical state. She sought help from a marriage guidance centre but her husband refused to go with her. Eventually the unsatisfactory home situation disturbed the oldest child who began to absent himself from school. A probation officer investigated the difficulties at home and a supervision order was issued two months before the patient's admission. The boy was sent up for a psychiatric opinion but was found to be normal and interest was transferred to the mother who then consented to see a psychiatrist.

On admission the patient was in poor general health and was five months pregnant. She was friendly and co-operative, clean and tidy and she mixed well with the other patients. She was depressed and very worried about the future and about the possibility that people had been talking about her because of her husband's conduct. She gave a clear account of the events of the past three years and supported her accusations of her husband's misconduct by a series of trivial and unconvincing incidents although she persisted in her claim that her

husband had at one time admitted to having had an affaire. She admitted to feeling guilty at having neglected her children and her home. Her husband confirmed the outline of her story but he refused to admit that there had been anything irregular between him and the other woman; he stated that the patient had imagined the connection between them. On intellectual testing the patient's Intelligence Quotient was in the region of 90. She expressed the desire to have her baby and to return home as soon as she was well.

In hospital attention was paid to her physical condition and her relationship with her husband was discussed fully. Despite intensive enquiries it was not possible to ascertain whether or not her husband had behaved irregularly. Her morbid feelings on the subject were taken at their face value. Her physical health improved. Eventually she discharged herself on 23.2.60 against advice in order to return and care for the children. She was seven months pregnant at the time.

Diagnosis: Depression in a vulnerable personality.

Follow up: Seen after the birth of the fifth child the patient had remained well and stated that her husband's behaviour to her had improved. She was happy with the baby and doing well at home.

Case 80

Mr. F.L.S., *aet.* 42, metal polisher, was referred to hospital by his general practitioner in December, 1953 on account of marital difficulties. He came from a working-class background and was an only child. His mother had abnormal personality traits and his father developed paranoid delusions after a stroke; one maternal aunt committed suicide, another died in a mental hospital. He had been a self-conscious person all his life and had few friends. His work record was good and he rarely drank alcohol. He had been married for fifteen years; the early years of marriage were stormy, with frequent quarrels about unemployment, money and the wife's inability to have children because of frequent miscarriages. After three years there was a temporary separation and the marital relationship improved; two children were born, *aet.* 6 and 2 years. Sexual relations had been adequate and neither partner had been unfaithful. There was no previous medical history of significance.

Early in 1953 the patient's wife struck up a friendship with another man though there was no evidence of any physical relationship between them. The wife admitted that she had probably provoked her husband with a view to arousing jealousy on his part. Frequent quarrels began, most of them following the husband's accusations. On two occasions he attacked her, the second assault leading to the application of severe manual pressure to the neck. In addition, however, the patient had become deeply depressed and after the strangulation episode had contemplated suicide for a short time; he was known to have become morose and appeared worried at work.

On examination the patient was depressed and at first reluctant to discuss his feelings. The patient and his wife were seen on three occasions in the out-patient department. Their marital difficulties were fully discussed and both partners stated that they felt much better for this opportunity which had helped to draw them closer together to each other. At the patient's request no further interviews were arranged.

Diagnosis: Neurotic depression.

Follow up: Four and a half years later the general practitioner, who had kept in touch with the patient throughout, stated that he remained "a difficult and irascible husband". The marriage had not dissolved, principally because the patient's wife had been able to assume a dominant role in the relationship.

Case 81

Mr. M.J.L., *aet.* 27, lorry driver, was admitted to hospital on 17.10.54. He came from a lower middle-class background, the second of three siblings. His father was a cruel, violent man. Distant relatives on both sides of the family had been in mental hospitals but the details of illness were not known. The patient had always been regarded as an unstable and moody person who had been subject to aggressive outbursts for many years; he had often truanted at school and was a poor mixer who had always set high score by precision; nevertheless, his work record was erratic. He had shown a tendency towards heavy drinking during the year before admission (ten to fifty pints of beer per week). The patient's marriage took place five months before his admission; he had known his wife for six years and had been engaged for four; there were no children; physical relations had been satisfactory (see below). His previous physical health had been good but he had been rejected by the army because of "bad nerves".

The patient had been excessively jealous of his wife since they first met. On learning of her association with a boy friend in the past he had behaved irrationally and left her for a short time, only to return repentant; this pattern of behaviour was repeated on several occasions and during their separations the wife had become friendly with other men, though she denied that intimacy had occurred. Each time they resumed their relationship more incidents had accumulated on which the patient brooded for long periods. Three years before their marriage the wife had become pregnant by the patient and procured an abortion; the patient had been very difficult at this time but resumed his relationship with her shortly afterwards. Both the patient and his wife declared that they had been trying to punish each other

during the protracted engagement period. Soon after the marriage the patient told his wife that he had found another girl and took to coming home late; the sole purpose of his behaviour was to upset her. Their sexual relationship between the quarrels and the separations was always satisfactory and there was no evidence of infidelity on the part of either spouse. Since the patient's marriage his symptoms had become more severe and he had been depressed and lachrymose on many occasions. He complained of his inability to rid himself of his worries about his wife's previous misconduct.

On examination in hospital he was tense, aggressive, slightly depressed and preoccupied with the subject of his wife's behaviour. There was no evidence of other morbid ideas. He was treated by in-patient psychotherapy several times a week; it was stated by a senior psychotherapist that the core of his difficulties lay in an "unresolved Oedipus complex". After some weeks the patient improved in hsopital, but on his visits home it was apparent that his difficulties remained unchanged. He became flirtatious with female patients and was thought to have shown some insight into his own difficulties. He was discharged on 18.2.55 to live with relatives as he felt unable to continue the married relationship. The patient attributed his improvement to the separation from his wife.

Diagnosis: Neurotic depression in an immature, aggressive personality.

Follow up: The patient did not continue to attend hospital after discharge.

DEPRESSION AND CHILDHOOD BEREAVEMENT

By

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This work was originally started because attention had been drawn to the high suicide rate in Hampstead. Geffen and Warren (1) originally reported this high rate. During the last ten years it has varied between 20 and 30 per 100,000 inhabitants (see Table I). It also compares with the suicide death rate of 10 per 100,000 for the whole community.

Table I

Suicides in Hampstead

(Population 96,450 in 1958)

Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Number of Suicides ..	28	23	18	17	22	29	25	23	27	33

This compares with 21 deaths from carcinoma of the stomach, 18 from carcinoma of the breast, 10 from road accidents, 9 from pulmonary tuberculosis in 1958 in Hampstead.

Certain other boroughs, such as Kensington and Hammersmith, have almost as high a suicide rate. There are probably between 6 and 10 times as many suicidal attempts as suicides in the area, some of which are admitted as emergencies to the two Hampstead hospitals.

Sainsbury (2) has described the ecology of suicides in London and links the high incidence of suicide in certain areas with loose community structure, family instability, shifting population and loneliness.

Stengel (3) distinguishes between the type of people who commit suicide and those who only attempt it. The actual suicides seem to be most frequent in males in the general community and with the highest incidence in late middle age. The suicidal attempts, on the other hand, are preponderantly female, with the peak in the twenties and in the forties. Stengel particularly stresses the "appeal" element in suicidal attempts as they are often a form of calling out for help from those most nearly associated with the individual. Naturally, this person can sometimes fail to save the patient in time and death can ensue, so that obviously there is no hard and fast distinction between the conditions leading to actual suicide and suicidal attempts.

In reviewing the cases presented at Hampstead General Hospital it soon became apparent that it was necessary to study the whole subject of depressive illness, both sudden acute phases of depression in apparently healthy, normal people and the more persistent depressive states, as both of these can lead to suicide.

The incidence of depressive illness in the community is considerable. In 1955 the mental hospital population was 147,000 and there were 111,326 new out-patients at psychiatric departments and 2,608 patients in non-statutory

beds, adding up to 260,934 (4). Of these about a third was suffering from depressive illness—say 87,000. This leaves out of consideration the old out-patients and the depressive patients attending their general practitioners and the cases treated by general hospitals which together far exceed this figure. It is also estimated that there are 22,000 new admissions a year to mental hospitals for severe depressive illness in this country.

In order to investigate the causation and incidence of depressive illness in Hampstead, I originally outlined a somewhat ambitious plan in which nationality, religion, family background, physique and the whole social situation were to be recorded and studied, but to facilitate statistical analysis the investigation was limited to one factor at a time.

For some years I have been particularly aware of the high incidence of childhood troubles, especially bereavement, in the previous histories of my depressive patients and of the intensity of these reactions in child patients. One can, however, be aware of something clinically without being able to measure or prove it. There is no such thing as a rejectometer, or coefficient of oedipal fixation; however the date of death of a patient's parents is a definite and accurately recorded factor which particularly lends itself to statistical analysis.

Freud (5) pointed out the similarity between mourning and melancholia and emphasized the loss of a "loved object" in depression but he did not specifically relate adult depression to childhood bereavement.

Abraham (6) developed a theory that children who have suffered some trauma or loss are subject to "primal parathymia" which makes them more liable to develop melancholia in later life. He alludes to difficulties caused by birth of a new baby and to Oedipal situations but, as Bowlby (7) points out, he fails to allude to definite grief and mourning in the child nor does he seem to appreciate the significance of actual bereavement. He came very near to appreciating this but, as Bowlby again points out, he was distracted by his theories of narcissism in the infant so that he vacillated in his theorizing.

Stengel says, "Parental loss is frequent in the histories of suicided individuals but it is difficult to evaluate these observations as suitable controls do not exist." Nevertheless, it seems that controls could be found to make an investigation of the childhood bereavement incidence in depressive patients statistically significant.

The hypothesis here is that a depressive illness in later years is often a reaction to a present loss or bereavement which is associated with a more serious loss or bereavement in childhood. The depressive illness is thus regarded as a kind of anaphylactic reaction which occurs in later life where there has been an early sensitization.

Diagnosis and Definition

Aubrey Lewis (8) defines depressive illness as that in which the clinical picture is dominated by unpleasant affect, not transitory, without schizophrenia and without organic brain disease. This is essentially the criterion accepted here.

Depression is regarded as an excessive preponderance of a human emotion, a reaction type and not a disease entity. As Adolph Meyer (9) said, "We should not expect hard and fast demarcation between normal and pathological and between mental and non-mental. We recognize practical but not absolute lines of subdivision, spheres of emphasis rather than thorough-going and distinct partitions."

Various types of depressive illness have been described; endogenous,

manic depressive, involutional, psychoneurotic, reactive, psychotic, etc., and their differentiation from psychoneurosis has been described but none of this complicated differential diagnosis is attempted here.

During the last 30 years there has been considerable controversy over the classification of depressive illness and its differentiation from psychoneurosis. Though this controversy is extremely interesting it cannot be fully dealt with in this paper. T. A. Ross (10), Farquhar Buzzard (11), Yellowlees (12) and R. D. Gillespie (13) were in favour of a definite distinction between depressive illnesses and psychoneurosis while Mapother (14), Aubrey Lewis (8) and Curran (15) opposed any such distinction. Recently Garmany (16), in a study of 525 cases, came to the conclusion that there was no essential difference between the various types of depressive illness. It is, in fact, becoming more and more apparent that the sub-divisions of depressive illness have neither scientific basis nor practical use and for the present purpose they can be abandoned.

When a patient is unhappy and ill through his unhappiness he can be said to be suffering from a depressive state. In the present investigation the diagnosis of depressive illness was made when a patient was sufficiently depressed to be referred by his general practitioner to the out-patient department of Hampstead General Hospital for his depressive symptoms.

The Investigation

During the last five years special attention has been paid to recording the ages at which any patient has lost his father or mother, whether they are alive or dead, or whether nothing was known about them. If there was no record of this information about the patient owing to inadequate history then the case was rejected from the series. Thus, there was no selection of cases but all depressive cases were included about which adequate records were available.

There were a number of cases in which the patient himself did not know anything about his father or his mother or did not know if they had died. These cases were included in the series under the headings of "Father unknown" or "Mother unknown".

This fact of the patient not knowing whether his mother or his father is alive or dead is, in itself, a very positive potential factor in depressive illness as it implies, to say the least of it, a serious break-up of the family structure or breach in relationship between the patient and his parents.

The age, sex, marital state and other data were noted on the card but the only items to be analysed are the age and sex of the patient when his father or mother died.

Two hundred and sixteen depressive patients were studied in this way—61 males and 155 females.

It is realized that every out-patients department has its own special clientele. This particular out-patients department probably has a higher proportion of minor depressive illness and transitory acute depressions than the out-patients departments which are primarily attached to a mental hospital where there is probably a higher proportion of severe depression requiring mental hospital treatment.

Controls

In order to evaluate the figures for childhood bereavement among the depressive patients obviously some control referring to the incidence of childhood bereavement in the general community is necessary for comparison. Some Hampstead general practitioners very kindly collected the information

TABLE II

Incidence of Orphanhood from 1921 Census

Age of Child	Total Both Sexes	Not Known	Per cent. Not Known	Total Known	Father Only Dead	Mother Only Dead	Both Dead	Number Fatherless Including Both Dead	Per cent. of Known Father-less	Number Motherless Including Both Dead	Per cent. of Known Mother-less	Number Either Parent Dead	Per cent.
4	610,982	7,672	1·25	603,310	34,517	11,361	1,607	36,124	6·00	12,968	2·16	47,485	7·86
9	710,630	8,203	1·15	702,427	61,377	21,495	4,543	65,920	9·40	26,038	3·71	87,415	12·40
14	727,875	18,087	2·47	709,788	76,090	31,898	8,390	84,480	11·90	40,288	5·75	116,378	16·60

from unselected patients who attended their surgeries; in addition, such information was obtained by the house physicians at Hampstead General Hospital from a number of patients in general wards suffering from medical or surgical disorders. These cases are not, perhaps, a perfect control as they were ill in some respect or, at least, were attending their doctors. However it has been estimated that 80 per cent. of the patients on a doctor's list attend him in any year. As, therefore, each doctor only took these records for a short time, there would tend to be a somewhat higher incidence in the controls of regular attenders. It was, in fact, found that a number of the controls were attending their doctors for psychiatric complaints. However, as this was an attempt to compare the incidence of childhood bereavement among depressive patients attending the hospital with that in the general community, it is assumed that those attending the general practitioner are a sample of the general community and these patients must be included among the controls, and this has, in fact, been done.

It was also felt that there must be some way of correlating the incidence of childhood bereavement from the Registrar General's figures giving the death rate, the birth rate, actuarial figures for the expectation of life and marriage rate and for the size of the family, but the mathematics would be somewhat complicated.

The table on orphanhood of the 1921 census, however (17), provides an invaluable set of figures with direct bearing on this particular problem. Table II shows the most relevant aspects of these figures and is an analysis of the figures from the 1921 census for the ages of children of both sexes from 4 to 5, 9 to 10 and 14 to 15. For instance, the percentage of children aged 4 to 5, fatherless (including those lacking both parents) from this table is 6 per cent. and one can, therefore, assume that 6 per cent. of the age group who are now 38 to 42 years of age lost their fathers in the first 5 years of life. From Table II, 9·4 per cent. of the 9 plus children were fatherless but of those children 6 per cent. had lost their fathers before the age of 5, thus 9·40—6 per cent.=3·40 per cent. who lost their fathers when they were between 5 and 9 plus years of age.

According to this method Table III has been produced to give the bereavement indices of the three age groups, figures which can be compared with the bereavement indices for the depressive patients and for the Hampstead controls.

TABLE III

Age Incidence of Bereavement Calculated from 1921 Census

Age at Bereavement	Loss of Father (Per cent.)	Loss of Mother (Per cent.)	Loss of Either Parent (Per cent.)
0– 4	6·00	2·16	7·86
5– 9	3·40	1·55	4·54
10–14	2·50	2·04	4·20
0–14	11·90	5·75	16·60

These figures are probably higher than those for other ages because there was the heavy loss of fathers 1914–18 during the war and of both parents in the influenza epidemic of 1918. There is no reason to suppose that the survivors until 1959 have a higher bereavement index than those who died between 1921 and 1959; in fact, we would expect the orphans to have a higher mortality. Thus the orphanhood figures of the 1921 census can be taken as a fair estimate of orphanhood among the middle-aged people of today. Moreover, if these

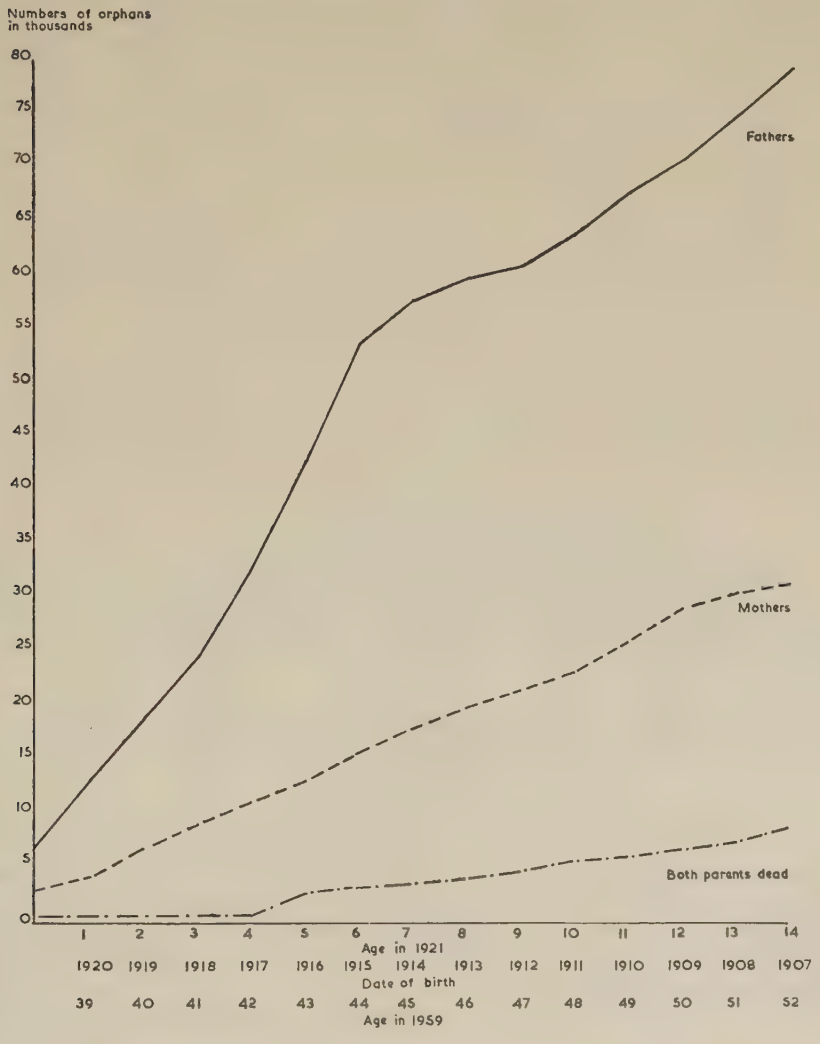
figures are used as controls for younger people, the controls are likely to err on the high side, especially in the 5–9 period for fathers as there has not recently been a slaughter of fathers equal to that of the 1914–18 war in this country. The comparable figures for the 1939–45 war were not, in this country, as high as in the 1914–18 war. Thus it appears that these figures for bereavement, calculated from the 1921 census, are quite fair controls for comparison with the incidence of childhood bereavement in patients suffering from depression now.

The sexes of the children have not been treated separately as it is obvious from the Registrar General's figures that there is no significant difference between the bereavement rate of boys and girls. There may, however, be a significant difference in depressive cases between the sexes.

The Registrar General's figures are worth examining in a little more detail especially to observe the impact of the 1914–18 war on orphanhood.

Chart 1 shows the numbers of orphans, plotted to the year of birth, present age and age in in 1921. This shows the high paternal mortality during the war

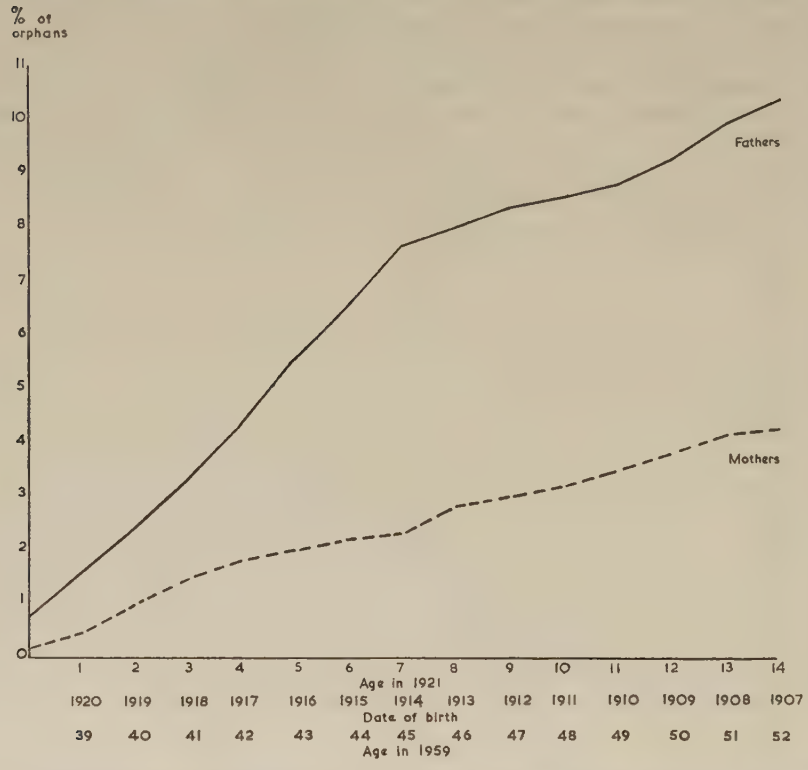
CHART I.—Showing numbers of orphans at ages 0—14 in 1921.



and this also shows in Chart 2 where the percentage of orphans at each age is shown. Chart 3 shows the increase in percentage per year, and particularly stresses the paternal mortality in the 1914–18 war.

The initial figure is fairly high, both for fathers and mothers, probably because it includes fathers who died in the nine months before the birth of the child, and it also includes the maternal mortality rate, which at this time was about 2 per 1,000 live births. It appears from these figures that about 1 per cent. of those who are now between 40 and 45 lost their fathers in the 1914–18 war.

CHART II.—Showing percentage of orphans in children of ages 0—14 in 1921.



If orphanhood in childhood is proved to be a significant factor in depressive illness, it would follow that the 1914–18 war is also a factor in present depressive illness; probably the 1939–45 war has not yet had its full effect in this respect.

RESULTS

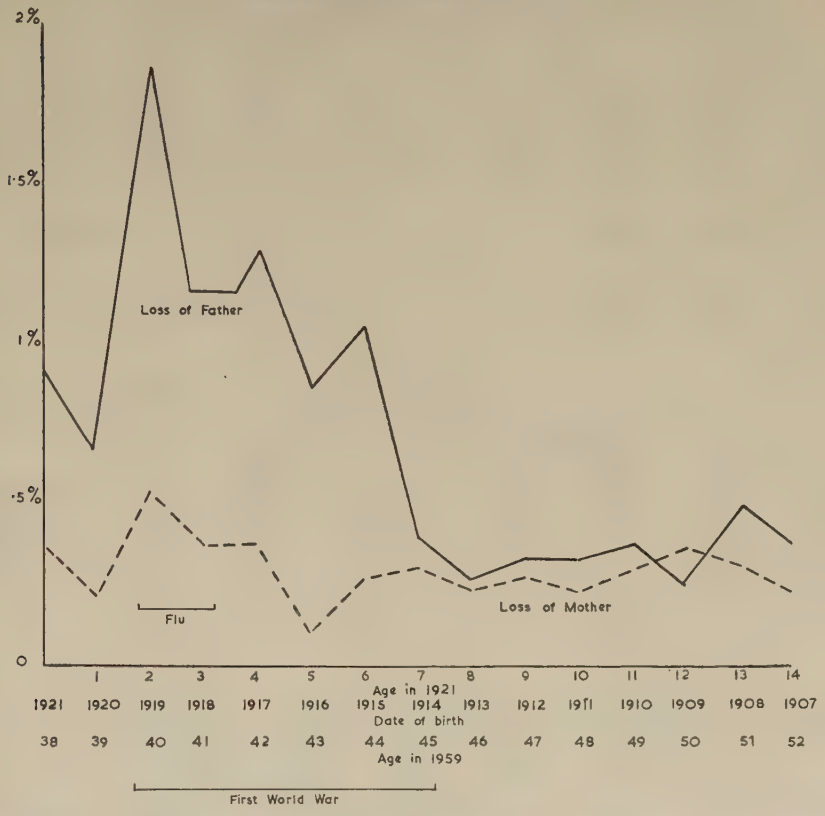
The standard error has been calculated to the formula:

$$e=\frac{P_1Q_1}{n_1}+\frac{P_2Q_2}{n_2}$$

Where E is standard error P_1 is the proportion showing the attribute in the sample, in this case, say, the proportion bereaved of a father in the years 0–14. $Q=1-P_1$; n_1 is the number in the sample (in this case, 201 cases known). P_2, Q_2 and n_2 are the corresponding figures for the controls using the Registrar General's figures. n_2 is 727,875 and the standard error in the Registrar General's controls is thus negligible.

The results of the collected statistics on childhood bereavement are

CHART III.—Showing annual increase in percentage of orphans according to date of birth and age in 1959 (from 1921 census).



summarized in Tables IV, A–F, the percentages are stated as a percentage of known cases, after deduction of the cases with unknown parents. Table IVD shows the most significant results. From this it appears that the bereavement

TABLE IVA

Tables Comparing Incidence of Childhood Bereavement in 216 Depressive Patients compared with

(*a*) Incidence of Orphanhood from 1921 Census

(*b*) Incidence of Childhood Bereavement in Controls from Hampstead general practice.

Male Patients—Loss of Father—57 Known Cases

Age at Loss	Per cent. Depressive Cases	Per cent. from 1921 Census	Difference	Standard Error	Hampstead G.P. Controls	Difference G.P. Depressives	Standard Error
0–14	26·3	11·90	*14·4*	±5·84	15·5	10·8	±6·87
0– 4	12·3	6·00	6·3	±4·35	6·8	5·5	$> \frac{d}{2}$
5– 9	7·0	3·40	3·6	±3·25	4·9	2·1	$> \frac{d}{2}$
10–14	7·0	2·50	4·5	±3·25	3·9	3·1	$\pm \frac{d}{2}$

TABLE IVB

Incidence of Loss of Father in Female Patients and Controls
(144 known cases)

Age at Loss	Per cent. Depressive Cases	Per cent. from 1921 Census	Difference	Standard Error	Hampstead G.P. Controls	Difference G.P. Controls	Standard Error
0–14	28·50	11·90	*16·6*	±3·8	11·95	*16·55*	±4·6
0– 4	4·86	6·00	−1·14	$> -\frac{d}{2}$	5·00	Not significant	
5– 9	9·03	3·40	*5·63*	±2·4	3·77	5·26	±2·83
10–14	14·60	2·52	*12·1*	±2·94	3·2	*11·4*	±3·3

TABLE IVC

Incidence of Loss of Mother in Female Depressive Patients
(146 known cases)

Age at Loss	Per cent. Depressive Cases	Per cent. from 1921 Census	Difference	Standard Error	Hampstead G.P. Controls	Difference G.P. Controls	Standard Error
0–14	23·30	5·75	*17·55*	±3·5	9·36	*13·94*	±3·932
0– 4	9·60	2·16	*7·44*	±2·44	3·12	6·48	±2·663
5– 9	6·85	1·55	*5·30*	±2·088	3·12	3·73	±2·35
10–14	6·85	2·04	*4·81*	±2·088	3·12	3·73	±2·35

TABLE IVD

Incidence of Various Childhood Situations of Loss Before the Age of 15, in 216 Adult Patients of Both Sexes, Suffering from Depression Compared with:

(*a*) The Incidence from the 1921 Census, and

(*b*) The Incidence in 267 Patients Attending Hampstead General Practitioners' Surgeries

	Per cent. in Depressives	Per cent. in 1921 Census	Difference and Standard Error	Per cent. in G.P. Controls	Difference and Standard Error
Loss of father ..	27·8	11·9	15·9±3·16	13·4	11·4±3·8
Loss of mother ..	20·5	5·8	14·7±2·82	8·8	11·7±3·32
Loss of both ..	9·2	1·2	8 ±2·8	0·2	9 ±3
Loss of either ..	41·0	16·6	24·4±3·56	19·6	21·4±4·35
A parent unknown	12·0	2·5	9·5±2·24	3·7	8·3±2·5

index from 0–14, of either parents, for both sexes of depressive patients, is 41, comparing with 16·6 from the 1921 census and 19·6 from the controls collected in Hampstead general practice. These figures are highly significant.

The loss of fathers is more frequent than the loss of mothers in all these tables, but the loss of either parent, during each of the phases of childhood, 0–4, 5–9, and 10–14 is significantly higher in those patients suffering from depressive illness than in the general population.

There are not as many significant results for the male depressives as for the females, as the number of male depressives was only 61, as compared with 155 females; the ratio of male depressives to female depressives appearing at the out-patients department being 1 : 2·54. It is interesting that the incidence of loss of parent of the same sex is just as significant as the loss of parent of the opposite sex.

It will be noticed in Table IVE that the loss of the father does not appear

TABLE IVe. (See also Chart 4)

Table Showing Age at Loss of Fathers in Depressive Patients (both Sexes), Compared with Census Controls and Patients Attending General Practices

Age at Loss of Father	Age Groups of Patients							Total	* Percentage of Known Cases	Percentage in 1921 Census	Difference and Standard Error	Percentage in General Practice	Difference and Standard Error
	15–19	20–29	30–39	40–49	50–59	60–69	70+						
0– 4		1	3	4	6			14	7·0	6·0	1 ±1·8	5·7	1·3±2·3
5– 9		3	4	4	4	2		17	8·5	3·4	5·1±1·97	4·2	4·3±2·33
10–14	1	4	6	2	8	4		25	12·4	2·5	9·9±2·32	3·5	9 ±2·58
15–19	1	4	6	3	3	1	1	19	9·5			4·2	5·3±2·41
20–29		3	10	4	10	3		30	14·9			11·5	3·4±3·19
30–39			2	5	5	4	1	17	8·5			8·4	Nil
40+				3	10	7	4	24	11·9			17·6	−5·7±3·33
Not known ..	1	6	4	1	2		1	15	7·0†			1·9	5·1±1·91
Alive	3	20	22	10				55	27·4			45	−17·6±4·4
Totals ..	6	41	57	36	48	21	7	216					

No figures available from Census over 15

Total known—201 Average age of patients—43 Average age of controls—43·5

* Percentage of total known, i.e., 216−15=201.

† Percentage of total, i.e., 216.

TABLE IVF. (See also Chart 5)

Incidence of Loss of Mothers at Various Ages of 216 Depressive Patients Compared with 1921 Census and 267 Controls from General Practice

Age at Loss of Mother	Age Groups of Patients							Total	Percentage of Known Cases	Percentage in 1921 Census	Difference and Standard Error	Percentage in General Practice	Difference and Standard Error
	15–19	20–29	30–39	40–49	50–59	60–69	70+						
0– 4		4	2	3	3	1	2	15	7·3	2·2	*5·1*±1·82	3	*4·3*±2·11
5– 9		4	3	4	1	1	1	14	6·8	1·6	*5·2*±1·76	3·4	3·4±2·1
10–14	1		5	2	3	2		13	6·3	2·0	*4·3*±1·7	2·3	*4* ±1·9
15–19		1	3	2	3		1	10	4·9			3·1	1·8±1·84
20–29			7	1	3	2		13	6·4			5·8	0·6±1·77
30–39			4	6	7	5	1	23	11·2			10	1·2±2·69
40+				2	14	8	2	26	12·7			19·8	*−7·1*±3·4
Alive	4	29	30	15	11	2		91	44·5			52·5	8 ±4·65
Unknown ..	1	3	3	1	3			11	5·1			1·9	3·2±1·7
Totals ..	6	41	57	36	48	21	7	216					

Total known—205

statistically significant between the ages 0–4. This is, perhaps, due to the comparatively high figure for father loss from the 1921 census, namely 6 per cent., which was the result of the 1914–18 war.

The incidence of bereavement of the depressive patients is compared with patients attending Hampstead general practices; there are not so many significant results because the standard error of the control is added to that of the depressive cases, and also the incidence of bereavement in Hampstead controls was higher than that from the 1921 census.

The incidence of childhood bereavement in depressives in the general population and in Hampstead is more graphically shown in Charts 4 and 5.

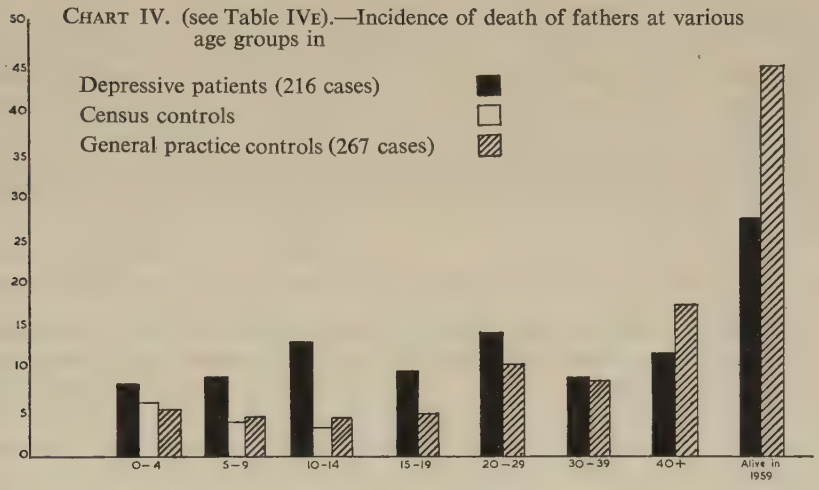


CHART IV. (see Table IVE).—Incidence of death of fathers at various age groups in

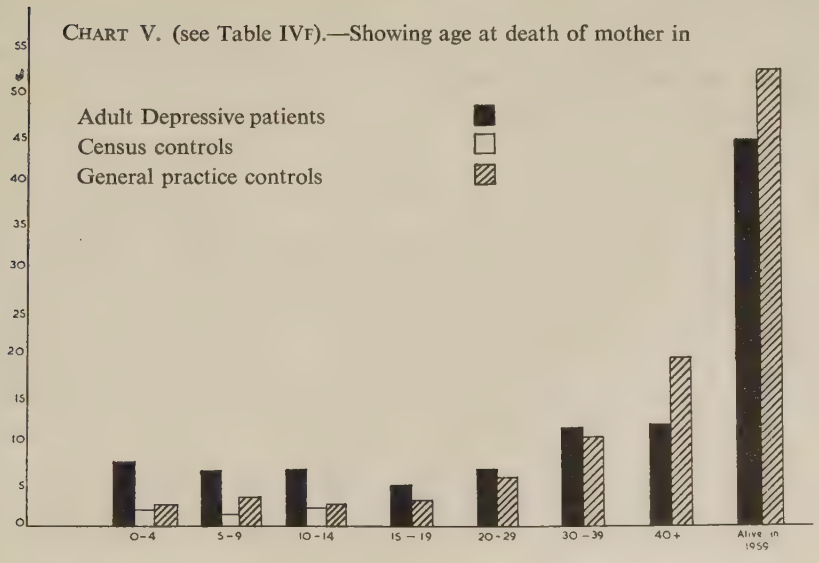


CHART V. (see Table IVF).—Showing age at death of mother in

From Table V it will be seen that the age groups of the Hampstead controls do not exactly coincide with the age groups of the depressive patients, However. the average ages are remarkably similar; for instance, the average age for male depressive patients was 42·7 and for male controls 43·4; for female depressives 43·1 and for female controls 43·7. Thus, the higher paternal mortality due to the 1914–18 war is likely to have affected the figures for the depressive patients and for the Hampstead controls about equally.

TABLE V

Age Groups of Depressives and Control Patients

	15–19	20–29	30–39	40–49	50–59	60–69	70+	Average Age	Total
Male depressives ..	1	11	14	15	15	4	1	42·7	61
Female depressives ..	5	30	43	21	33	17	6	43·1	155
Male controls ..	3	30	17	17	14	14	9	43·4	104
Female controls	10	43	27	25	17	20	21	43·7	163

The average ages of the controls and depressive patients correspond, but the age groups do not entirely correspond.

The Incidence of "Parents Unknown" in Depressive Patients and Controls

Table IVD compares these figures. It will be seen that of the depressive patients 12 per cent. did not know whether one or other parent was alive or dead. In the 1921 census (0–14 age group) 2·5 per cent. only have unknown parents although this section includes also the unrecorded ones who may have been known to the individual. Thus there seems to be a significantly high incidence of unknown parents among depressive patients.

When one considers what a severe trauma or at least evidence of family disruption is a situation in which a person knows no significant facts about his father or his mother, this is not surprising. The incidence of an unknown parent is significantly higher in depressives also when compared with the Hampstead controls.

These statistics, in fact, support the original hypothesis that both bereavement in childhood and family disruption are important factors in the development of depressive illness in later life.

Situations Immediately Precipitating the Depressive Illness in Adults

No attempts has been made to analyse statistically the immediate provoking situation. In only very few cases did there appear to be no provoking situation. The common situations were broken love affairs, loneliness, marital difficulties, death of spouse or relative, loss of job and trivial quarrels or rejections. On the physical side there were a few precipitated by influenza or operations such as hysterectomy. No cases of puerperal depression were in this series, probably because there is no obstetric department at Hampstead General Hospital.

The main factor present in most of these provoking situations was some degree of loss or rejection. This was, of course, most obvious in the broken love affair. The commonness of this rejection factor, especially when there is a

suicidal attempt, would suggest the term "Dido" reaction for this type of illness.* In fact, it seems that the "Dido complex" is much more important in the psychopathology of depressive illness in England than the "Oedipus complex" which only seemed obviously important in one case in the series.

In many of the cases the obvious provoking episode was trivial, though of a rejecting nature. In this class would be a slight reproach from an employer, or a failure to achieve some desired end.

Loss of a job in which most of the life has been spent in men in their fifties proved to be a particularly dire situation, resulting in one case in suicide and in another in chronic depression.

Of particular interest, in view of the main hypothesis of this paper, were two cases of women who had had their illegitimate babies adopted at about a year. This broken maternal bond seemed to give these mothers a very intractable sense of loss and guilt which was very difficult to modify. These cases had not themselves been bereaved in childhood and this situation is, in fact, the converse of the situation of childhood bereavement which has been the main concern of this paper. In fact, the prematurely broken parental relationship seems to be a severe trauma both to the child and the mother. Such a broken bond is obviously biologically unsound, as it is not conducive to the survival of the child and it seems natural, just as physical pain is felt when a damaging trauma is applied to the body, that emotional pain or depression is suffered when a damaging trauma is endured by the family.

Discussion

Depression is the unpleasant affect which occurs when things are going wrong, when there is a persistent frustration of instinctual and biological needs, and it certainly occurs in children.

If one considers that crying is the normal somatic response to depression, depression can be said to be the first emotion felt by a human infant when he leaves his mother's womb and enters a cold and uncomfortable world with a midwife smacking his bottom. Warmth, suckling and food relieves this state and during infancy the satisfaction of warmth, food and physical handling becomes closely associated with the person of his mother. This can be interpreted in the psychoanalytic terms, but it can also be stated in organic or Pavlovian terms. It does not matter particularly what system of terminology is used. The appearance and whole person of the mother is the most important conditioned reflex associated with the instinctual satisfaction of the human child. A break in this association over a long period produces depression in the child, as has been shown by Spitz (18) and many others. If there has never been any regular pleasurable association with the mother then the satisfaction of feeding and comfort become much more diffusely associated, and no particular relationship with any one person is established; separation then does not seem to involve much depression, although such a situation without any close personal relationship probably involves much impoverishment and retardation in the child's intellectual and emotional development. This absence of "trauma" or "grief reaction" has been observed by Spitz where there was no previous satisfactory relationship with the mother.

Bowlby (19) has outlined three stages in the separation reaction of an

* NAM QUIA NEC FATA MERITU NEC MORTE PERIBAT
SED MISERA ANTE DIEM SUBITOQUE FURORE.

—(Virgil: *Aeneid*, Book 4, Line 696)

"So she perished, not by a deserved fate, but in misery and before her time, in a frenzy of mad passion."

infant. Firstly, the separation anxiety with crying; secondly, despair with apathy, and thirdly, at the end of several weeks, a stage of acceptance of the present situation with some impoverishment of affect and fracture of the maternal bond. It may well be that this type of trauma is likely to produce a nucleus of depressive affect which can be re-stimulated by subsequent rejections in much later life.

In the series of cases studied here, however, it was not only in infancy that the trauma of bereavement seems to have effect but throughout childhood and the loss of a father is significant as well as the loss of a mother and is certainly commoner.

It may be that in its milder forms depression serves a biological purpose as it involves inhibition and withdrawal from an intolerable situation. It also sometimes involves varying degrees of calling out for help which can be effective. People able to feel depression are aware of lack of love, affection or success and when not depressed are usually able to show positive emotions. People subject to depression are among the most valuable people in the community. But when severe depression, in various rejection situations, has occurred in childhood it, as it were, sensitizes the person so that a later similar situation brings up all the forgotten force and misery of the childhood situation, energy for the most part untapped, but when released by stimuli similar to the original trauma, the affective energy is released in all its primitive intensity resulting in the complete incapacitation of the patient.

In this paper I am stressing the rejection and bereavement factors in depressive illness because this is the special subject here, but this emphasis on the "nurture" factor in no way implies a denial of the importance of "nature" or heredity. It seems possible, though it is by no means proved, that whether or not a breakdown occurs is often dependent on the early environment; which type of breakdown is more determined by the constitution and heredity. It is worth pointing out, however, that these results emphasizing the significance of early bereavement are as valid as those stressing the significance of heredity in depressive illness. The death of a parent is a purely environmental influence on a child, and most unlikely to be associated with any possible heredity factor linked with depressive illness (unless the death is by suicide). In heredity research, however, it is not possible to separate the influence of heredity from environment. For example, the rearing of two identical twins separately necessitates an odd if not dire situation likely to be traumatic to both of them. Also if a parent develops a depressive illness, that in itself is traumatic and involves a rejection of the child. In this series depressive illnesses occurred in two siblings, who had endured the same childhood loss of their mother. The actual picture of the depression was almost identical in this pair and one can question whether the illness was more determined by their common heredity or by their common early environment.

It is by no means implied here that childhood bereavement is the only factor in depression, or that it operates in every case but that it is one of the factors which are significant. Many other factors are obviously also important, such as physique and heredity, organic factors such as after-effects of virus infections, and head injuries, endocrine factors, especially in women (as shown by McKinnon and Thomson (20) who found that suicides usually occurred in the luteal phase of the ovarian cycle). Other levels of emphasis are the biochemistry and electro-physiology in the mechanism of depression. The importance of these physical factors is in no way diminished by the emphasis here on the biological factor of bereavement and loss.

The severity of the actual immediate situation is also important as already mentioned—but as Lewis asks, "What is an adequate situation to precipitate a mental disorder?" and he adds, "The personality often makes the situation and then is appalled by it." And the question that follows is, naturally, "What makes personality?" This is the question we are all struggling to answer.

Prophylactic and Therapeutic Implications

One of the main conclusions from this work is that a special attention should be paid to children who have lost a parent or whose families are in some way disrupted.

If, as the statistics imply, 41 per cent. of people suffering from depressive illness now lost a parent in the first 15 years of their life, compared with 16 per cent. in the general population, then it would seem that something could be done to prevent depressive illness by increased care of these orphans. Also when one appreciates that, in addition, 12 per cent. of depressive patients have no knowledge of one of their parents, it seems that this prophylactic care should include those whose families are disrupted for other reasons than death.

Exactly how to prevent subsequent depressive illness in a bereaved child we do not know, but it seems reasonable to suppose that solicitude from surviving relatives and an adequate parent substitute, provide the environment most conducive to recovery from childhood bereavement. The fact that the child at the time shows no obvious emotional disturbance is no evidence that he or she is not deeply affected, rather the reverse. In many cases of bereaved children, or children parentless for some other reason, definite psychiatric treatment is needed. This point was, in fact, stressed by Sylvia Anthony (21) in 1940. She considers that 8 to 12 is the most traumatic time for the loss of parents, but this is not borne out by the present figures where the loss of mother appears equally significant in each 5-year cycle of childhood and the loss of father seemed more significant in later childhood. The object of prophylactic therapy is to help the child to face the fact of his loss and to be aware of his feelings towards the dead parent. especially to compensate him for the loss with adequate emotional attachment. The histories of patients who have done best usually show some such re-establishment of an emotional relationship and adequate compensation.

It is necessary to point out that these results of bereavement apply particularly to the incidence of depressive illness in an English community. In some primitive communities when the child is orphaned, there is immediate and effective adoption by the nearest relatives or neighbours, with powerful maternal instincts. Schweitzer (22) speaking of a West African community says, "Among these nature peoples there are no widows unprovided for and no neglected orphans. The nearest male relative inherits the widow and her children." It is possible that in these communities the child is protected from some of the worst consequences of orphanhood which one observes in some highly organized communities. In the more developed and civilized communities there is more of a tendency to leave the care of the orphan to the State or County Council or to charitable institutions, with not always satisfactory results. The conclusions, therefore, about the influence of childhood bereavement on later depressive illness, though perhaps of general significance about the type of situations producing depression, may not be equally significant in communities of altogether different family and social structure.

Finally, though childhood bereavement has been shown to be a significant

factor in depressive illness, it is not, of course, suggested that childhood bereavement is always followed by depressive illness or that depressive illness cannot occur without it. What is stated is that about 40 per cent. of the depressive patients were orphaned before the age of fifteen and that about a half of depressive patients were so orphaned or have no knowledge of one or other parent and that orphanhood as a child more than doubles the chances of a human being developing depressive illness.

The theory of depressive illness here outlined is simply psychobiology based on the reactions of different human beings to various stressful situations both in childhood and adult life and provides an additional reason for diminishing the distinction which seems to have grown up between adult and child psychiatry.

Summary

1. The incidence of loss of parents during childhood has been investigated in 216 unselected patients suffering from depressive illness attending the Hampstead General Hospital Psychiatric Department.

2. Control figures were taken from the 1921 orphanhood tables from the 1921 census.

A second series of controls were taken from 267 patients attending Hampstead general practice surgeries.

3. The incidence of childhood bereavement was significantly higher in the depressive patients than in both the general population and Hampstead general practice patients. For instance 41 per cent. of depressive patients lost either parent before the age of 15, compared with 12 per cent. from the Census, and 19·6 per cent. from Hampstead general practice.

The loss of fathers was more significant in later childhood in the age groups 5–9 and 10–14. The loss of mothers was equally significant in each five-year period of childhood.

4. From this it is concluded that bereavement in childhood is one of the most significant factors in the development of depressive illness in later life.

5. There was a significantly higher proportion of depressive patients who had no knowledge of their parents than in the general population.

6. The theory is put forward that depression in later life often occurs through the re-activation by possibly minor rejection situations of an apparently recovered depression in childhood.

7. The therapeutic and prophylactic implications of this theory are discussed.

Examples of Patients in Present Series

The patients in the present series were, as already mentioned, extremely varied, but a clear picture of the types of patients can really only be obtained from a few case histories.

There were certainly a number showing self-reproach, early waking and with depression worse in the mornings but there were also many which could not be regarded as typical of any syndrome in any existing system of classification.

Case No. 1

Diagnosis: Typical recurrent depression of "endogenous" type. Loss of mother when patient was 11.

A 53-year-old married woman complaining of depression, difficulty in concentrating, loss of interest and loss of appetite. She also had suicidal thoughts and fear of death.

Depression was worse in the mornings and was associated with early waking.

The present attack of depression dated from 6 months previously and was associated with anxiety about her daughter-in-law's pregnancy.

There had been four previous depressions all starting in November and lasting from 3 to 6 months.

Her mother died when she was 11 and her father when she was 24. One of her 3 sisters also suffered from depressive illness.

She had a difficult early life as her father re-married when she was 12 and the stepmother was unkind. The patient ran away from home when she was 15 and worked in a store and later in the Civil Service.

She is reasonably happily married and has 5 grown up children. She recovered from the present depression with supportive drug therapy.

Case No. 2

Diagnosis: Agitated depression in Irish orphan incapacitated by poliomyelitis.

A 25-year old domestic servant. She was seen in out-patients department in November, 1954, complaining of depression. She was agitated and totally incapacitated. The condition had persisted for several months, increasing in intensity.

She had been referred to a convalescent home for menorrhagia for which no organic cause was found and while there she became very agitated.

Her mother died when she was 7; her father took little responsibility for her and is said to have died when she was 12. She was cared for by an aunt. She took various domestic jobs in Ireland and, at the age of 23, came to England where she worked in a nursing home. She is said to have been a conscientious worker in spite of her incapacity which affects her left arm and leg. This illness occurred at the age of 7, coinciding with the death of her mother and was followed by considerable hospitalization for a year or two.

At the time when seen in hospital she had been living alone in a bed-sitting room and was quite unable to manage. She was wringing her hands and saying, "I do feel so depressed I do not know what to do."

She was considered to be suicidal and admission to a mental hospital was arranged as a voluntary patient at once.

Case No. 3

Diagnosis: Chronic depression "endogenous" in type. Severe infantile bereavement.

A 45-year-old unmarried woman, housekeeper for her adoptive sister, complaining of depression, agitation, pre-occupation with bodily symptoms. "I feel as if I cannot pick up, terrible pains across the head." The depression is worse in the mornings. It is also associated with broken sleep.

The onset has been gradual and increasing in severity in a chronically obsessional personality.

Her mother died at her birth. Her father committed suicide when she was 5 and she was then sent to an orphanage until she was 10 when she was adopted by a Jewish family who treated her fairly well. Her adoptive father died 3 years ago and much of her breakdown dated mainly from this.

She had no friends and no love affairs and no outside interests apart from her adoptive family.

She had been managing precariously in the out-patients department for four years. Occupational therapy has now been arranged for her and her admission for electric convulsive therapy is being considered.

Cases Nos. 4, 5 and 6 are much more diffused and psychopathic examples of depression. As follows:

Case No. 4

Diagnosis: Recurrent agitated depression.

A 63-year-old single canteen worker complaining of depression with agitated and broken sleep. She has been off work for four weeks.

She has been suffering from depression, with about six attacks, since 1948 when she was admitted to a mental hospital for electric convulsive therapy. She has many times had E.C.T. for this condition with relief of symptoms.

She is living with her sister and working in a canteen. Both her parents died when she was 14 and there were thirteen siblings. She has worked all her life in domestic work. Has been a steady and conscientious worker. When seen in 1959 re-admission to a mental hospital was arranged for a further course of E.C.T. and she will probably recover from this attack.

Case No. 5

Diagnosis: Depression based on long-standing character disorder and lack of relation to parents. Psychopathic personality.

A 30-year-old single shorthand-typist complaining of exhaustion and depression for many years.

She had been able to work until recently but had an unhappy love affair with a married man and an unsatisfactory homosexual attachment.

She had some analytic psychotherapy without much improvement. She was an orphan

adopted at the age of 5 years and brought up abroad. Came to this country as a refugee before the war.

Her admission to a rehabilitation unit was arranged but she did not react very well to the treatment there.

Case No. 6

Diagnosis: Depression with paranoid and hysterical features. This patient was able to form relationships with people and to function in outside life. A case which defies any precise labelling.

A 29-year-old single clerical worker complaining of depression and various bodily symptoms with some ideas that her symptoms were due to previous bad treatment.

She had previously been treated with E.C.T. at a mental hospital and had somewhat improved.

Her father died when this patient was 10. Her mother is alive. She was brought up in India. She was able to be maintained outside mental hospital and was supported there while in the out-patients department. She continued at work.

There seems to be a group of patients whose depressive symptoms date from their twenties or who have continued from childhood symptoms which have proved quite resistant to all forms of physical treatment, electric convulsive therapy and leucotomy. These, at times, show a very strong "hysterical" trait in the course of psychotherapy. The depressive episodes in these patients have such a regressive quality that they would almost justify the diagnosis of "recurrent regression". For this condition it seems that persistent psychotherapy, group therapy and attempts to introduce the patient into group activities are the treatment of choice, with periodical shelter in hospital for the acute episodes, rather than energetic physical treatment. Case No. 7 is an example of this condition, also Cases No. 8 and 9.

Case No. 7

Diagnosis: Recurrent regressive and depressive episodes.

A 37-year old single nurse seen following a suicidal attempt. She had made many previous attempts, always by taking barbiturates.

Since 1947 she had been periodically admitted to six different psychiatric clinics and mental hospitals. She had had E.C.T. and deep insulin with no change in her condition. Diagnosis had varied from depression with hysterical features and psycho-neurosis with psychopathic features to paranoid psychosis, according to her behaviour at the time and the mood of the psychiatrist of the moment.

In between these various hospital admissions she has been able to train as a nurse and function properly.

In June, 1957, at an out-patient department, she complained of migraine and was treated. She then developed depressive symptoms and was given a course of E.C.T. from August to 5 December. While she was receiving this twice a week she was working as a Sister in charge of a ward. She found it more and more difficult to concentrate and was in somewhat of a panic when she was admitted.

Her father was an Indian doctor who deserted his family when she was a child. Her mother committed suicide when she was an infant and she was brought up by foster parents of a different name to herself but she maintains that she never realized that she was not their child until she was 18. She rejected her foster parents as soon as she found out her true origin.

She tended to make quite intense friendships with women.

On examination she was somewhat sulky and depressed. Her memory was somewhat impaired. She complained of this "dreadful depression". She had considerable resentment against most of her previous treatment.

She was kept in bed and "babied" by the nurses. Barbiturates were cut down. She was given an opportunity to ventilate her very considerable resentment against doctors. She slowly recovered her interest in reading and in her work and, after a brief holiday with a friend, she was able to return to work.

Another episode occurred in August, 1958 for which she was sent to a mental hospital for a few weeks. She had another relapse in October, 1958 in which she was very depressed. She improved for a while but when she felt that a nurse had slighted her she discharged herself and then refused to go when another patient arrived for the bed. She was on the point of being sent to the Observation Ward when she decided to go home with a friend and is now employed again.

This woman does not really seem to be suffering from recurrent depression so much as recurrent regression. From time to time, when frustrated or irritated, this lady complains excessively to doctors that she is incapable of managing and develops a kind of crescendo of irritation and depression for which she has to be put to bed for a few weeks.

She has had E.C.T. but does not respond to it. She does however, respond to bed rest and "babying". It may be that her present reaction is a repetition of some of her infantile resentment and rejection.

The prognosis seems to be fairly good provided that she can be looked after when she regresses but, as she grows older, the environment becomes less tolerant of these recurrent regressions.

Two further cases may be quoted of depressive states developing in the first place in young women which have proved absolutely resistive to E.C.T. and even leucotomy.

Case No. 8

Diagnosis: Chronic depressive state, periodic regression, reactile to psychotherapy but not to E.C.T.

A 31-year-old nurse complaining of depression concerning which she has had many severe episodes since the age of 17.

She has had a good deal of treatment in various mental hospitals. She has had 100 E.C.T.s and a leucotomy.

The original episode at 17 seems to have been related to sex problems but also followed the suicide of one of her brothers who was in the army. Her father died when she was 28 but her mother is still alive. She has two surviving brothers.

The depression for which treatment was first obtained was at the age of 20 when she left her boy friend to go to a different district with her girl friend who, however, later got married. Extremely energetic treatment at various hospitals on and off for 10 years followed but failed to effect any radical improvement. She occasionally did domestic jobs. Her boy friend also received E.C.T.

She had been referred to the out-patients department so that monthly E.C.T. should be continued to maintain her. She was then given individual and group therapy; she is now improving and is hoping to obtain a nursing job again. An attempt was made to re-establish suitable contact with the original boy friend but after 10 years there seemed no future in this association. She has made improvement after about 2 years of group therapy—to which, however, she had not been able to make any vocal contribution.

This patient was definitely diagnosed as suffering from recurrent endogenous depression. Nevertheless she was, even when badly depressed, socially reactile to psychotherapy and is an example of the type of case not helped by E.C.T. One of the more difficult aspects of this patient's present condition is the persistent sense of resentment against the medical profession for having, in her opinion, damaged her personality. A case history such as this suggests that for a certain type of depression, electricity, or even leucotomy, is no substitute for love.

Case No. 9 also illustrates this type of depression.

Case No. 9

Diagnosis: Chronic recurrent depression with many hysterical features.

This is a 35-year old widow complaining of depression and insomnia. She has had these symptoms for very many years.

Her mother died at her birth and she was cared for by her grandmother who died when the patient was 30. She had an unsettled and unhappy early life and no relationship with her father.

She was a W.A.A.F. during the war. Received a head injury while on duty. She complains of headache and dizziness but no organic lesion was found. Several attempts at suicide occurred and she became addicted to many pills, including thyroid, which enabled her to be treated in various hospitals for hyperthyroidism.

She married but the marriage was unsuccessful, the child died and later the husband also. The patient has attended numerous out-patient departments and been in many mental hospitals both in England and in America. She has had about 200 E.C.T.s and two leucotomies.

During the fortnight she spent in the Hampstead General Hospital after a suicidal attempt with barbiturates she proved to be a difficult patient in the ward but was able to return home. The question of her entering an Observation Ward was seriously considered.

She lives on her own in one room. Occasionally baby-sits for neighbours.

This patient from time to time regresses to an infantile state and seems to need considerable support at these times.

She is still reactile to an interview but tends to be very demanding.

There is no evidence that the E.C.T. and leucotomies have had any helpful effect.

All three of these cases, in fact, had a remarkable number of E.C.T.s, 60, 100 and about 200 respectively, and one has had one leucotomy and one has had two. It seems surprising that, in these cases, belief persisted in the efficacy of these treatments in spite of the obvious discouragement of the patients' failure to recover.

Electric convulsive therapy seems to be particularly effective in the depressive illnesses in older patients where the patient does not react to the therapeutic interview. This inability to react to the therapist as an indication for E.C.T. has been emphasized by Denis Hill (23). I would use the term "reactility" as preferable for this quality of ability to react to an interview rather than "reactivity", which can be confused with the old diagnosis of "reactive" depression, meaning depressions that are considered to be reactive to the present environment. "Reactility" to the therapist is, of course, a quality of the therapist as well as of the patient, and obviously different psychiatrists will have slightly different criteria for recommending E.C.T. The non-reactile depressive states are more common in the later half of life and include depressive states of psychotic intensity where there are delusions.

Suicidal attempts had occurred in 22 of the patients. Case No. 10 is an example where a particularly clear aggressive component against her husband was present. In some cases the infantile difficulties seem to have been so profound that the condition of the patient was one of a long-standing chronic character disorder.

Case No. 10

A married woman with one son aged 23.

A suicidal attempt was made for which she was admitted to Hampstead General Hospital. She took 29 grains of Soneryl but recovered fairly quickly with Megimide. A previous suicidal attempt had occurred at the age of 10 when she tried to jump out of a window but her father dragged her back. On this occasion she said she had been accused of doing something she had not done.

A second attempt occurred two years ago when she felt rejected by her husband.

Her father died four years ago. He was said to have been very strict but the patient was fond of him. Her mother is still alive and she has one brother aged 39, single, who lives with his mother. The father is said to have been disappointed with her as he wanted a boy. At the age of 5 she was sent away for 9 months to stay with an aunt while her brother was being born. She hated this and has been deeply resentful about it ever since. She was not told about her brother's birth until she returned home.

She did quite well at school and led a social life until her marriage at the age of 30. She has remained fond of her husband but he has tended to reject her from time to time. She had a miscarriage soon after marriage and again in 1941 and is now very fond of her 23-year-old son. She has been working in the Civil Service ever since 1941 and was driving ambulances during the war very competently. In July, 1958, she had a hysterectomy for menorrhagia because she had moods of severe depression for a few days before her periods. She thought that the hysterectomy would take away the depression. On account of the tension between her and her husband they ceased sex relations. Her husband developed a duodenal ulcer and then had an operation for this 3 years ago. Both had been jealous of one another. She was jealous of her husband's work and he was jealous of her friends as she was rather a social person.

On examination she was able to talk freely about her trouble and even smile. She said, "I wanted to die and was sorry for myself. It was silly to take so few." Of her husband she said, "I would like him to feel 'I drove her to it'."

A fairly good contact was made with her and her confidence obtained. Her husband was seen but he had as much resentment as his wife and was not very conciliatory. She had a few interviews in psychotherapy in which the main topics were her jealousy of her husband and her resentment at rejection and her faulty relationship with her mother.

On leaving hospital she attended group therapy for about 5 sessions and greatly improved. She found that she was able to help the other patients considerably and on moving to another neighbourhood she said she was going to take up some social work.

This suicidal attempt seems to have been an aggressive gesture on the part of this woman to a situation of rejection by her husband especially in her rather precarious state immediately after hysterectomy.

She seems to have been sensitized to rejection situations by the separation

of 9 months while her brother was being born. There was no actual bereavement in her childhood, but this separation and the resultant jealousy has remained a very dominant theme in her life. The aggression against the husband was fairly clear in this suicidal attempt.

Lack of knowledge of parents, even if they were not actually dead, seemed to be a factor in the following examples, Cases No. 11 and 12.

Case No. 11

A 35-year-old single woman complaining of depression and fear of insanity. "I feel so ill; I cry very easily; I am a failure all round, I cannot get down to anything."

The present depression has been coming on for 6 months and was related to the gradual termination of a relationship with another woman.

The patient was hard-working and conscientious in her work but had few friends.

Her mother and father were separated. She knew neither of them and had only once seen her mother 10 years previously in a mental hospital.

Her only brother, with whom she had been brought up, was killed in the war.

She had been brought up by her maternal grandmother abroad until the age of 16 and had never known much affection.

This patient was asked to attend for psychotherapy but wrote to say that she was helped by the discussion and proposed to deal with her problems by self-discipline and reasoning.

Case No. 12

An unmarried Irish tool fitter, aged 26.

He complains of lack of confidence and depression. He had been off work by himself in a bed-sitting room for 3 weeks before attending hospital.

Had been having a love affair with a girl who was willing to marry him but he was afraid of this relationship.

He never knew his own parents. He was in an institution for 3 years and from 3 to 19 years of age was boarded out with foster parents, at 19 he joined the R.A.F. and managed without illness for 5 years. Since leaving the R.A.F. there had been rather frequent changes of job. He has been unable to establish close relationship with any girl friend and his foster mother recently died.

He improved after a short period of hospital admission during which he showed some phase of irritability and depression. Since discharge he has returned to Ireland and there is a possibility of marriage.

Some patients who had not actually been bereaved in childhood had lost their families in concentration camps in Germany whilst the patients themselves had been able to escape. This particular situation is one which is liable to produce a rather rigid depression with guilt feelings at having been the only survivor. Case No. 13 is an example of this situation.

Case No. 13

A 50-year-old married woman who came to this country from Germany in 1939.

She complained of chronic depression with many bodily ailments, loss of interest, in a situation of being alone all day.

She is married but has no children. Her father, mother and nine siblings were all killed in concentration camps.

An attempt was made to maintain her by occupational therapy and socialization.

There were three cases in the present series of women who had had children adopted. Two of these women had not themselves been bereaved as children but one had.

Case No. 14

Diagnosis: Chronic depressive state. No childhood bereavement but converse situation due to separation between this parent and her child.

A 39-year-old widow complaining of depression, inability to settle down to anything. ("I must be made not to commit suicide.")

She has had many different jobs, cleaner, washing up in hotel, but off work for the last month and living on Public Assistance.

Her parents survived her childhood. Poor relationship with father, who is still alive and said to be alcoholic. Her mother died 7 years previously.

She married at the age of 22 but her husband was killed in the R.A.F. after 3 months.

Her condition seems to date from 6 years before her attendance when she had an illegitimate child. She went to work almost immediately after the birth and the child became ill. She had him adopted at the age of 1 year. She knows where he is and sometimes sees the child from a distance.

This patient was in a very chronically depressed state and was not really able to co-operate

very well with various efforts to rehabilitate her. She had twice been in rehabilitation centres without improvement.

The separation between mother and child here seemed to be an insoluble situation.

Case No. 15

Diagnosis: Depressive state in a situation of separation from her child.

A 29-year-old single woman, housekeeper, complaining of depression and difficulty in concentrating.

This condition mainly dates from about 1 year previously when she had an illegitimate child which shortly afterwards she fostered out. She has seen the child about 6 times since.

Her parents are alive but she has a poor relationship with them, especially with her mother.

She was treated in the out-patients department with psychotherapy and was helped to handle the social problem.

Case No. 16

Diagnosis: Severe depression, marital discord. Adopted orphan.

A 36-year-old married woman, complaining of depression, suicidal thoughts, weeping spells following rows.

Immediate situation seemed to be reactive to an extremely unhappy marriage. There had been a few not very serious suicidal attempts during recent years.

She had had an illegitimate child and had had it adopted. She herself was illegitimate and had not known her mother or father at all. Was adopted. Her adoptive mother died when she was 13 and her adoptive father re-married. Patient did not get on well with new wife.

She was reasonably intelligent and managed clerical and telephonist's work satisfactorily. She attended out-patients department a few times.

Left her husband and broke down completely and went into a mental hospital. Had E.C.T. subsequently. Later took job and is managing fairly well on her own.

Actual Suicides

Actual suicides occurred in 3 patients in this series in spite of considerable efforts to remedy the situation. There were 2 women aged 25 and 51 and one man aged 57. The male patient had had to retire early owing to the liquidation of the firm to which he had devoted his life as an accountant. He was single but had had a long-standing inconclusive liaison which he had finally decided to give up. He had no close friends or hobbies. He had persistent guilt feelings that he had not cared adequately for his parents who had died 10 years previously. This patient refused in-patient treatment and E.C.T. He was not certifiable. He was persuaded to attend for occupational therapy and an attempt was made to support him in the out-patients department. However, he missed an appointment, having the good manners to send a letter of explanation, and several days later was found drowned in the Thames.

Both of the female patients had been bereaved between the ages of 10 and 14. Case No. 17 shows an apparently mild but fatal depression in a woman of rather psychopathic personality and most unstable early background.

Case No. 17

A 25-year-old married woman separated from her husband.

She had worked as a gardener, a mother's help, secretary, smuggler, etc. She complained of depression and suicidal urges. Her mother died when she was 10 of gas poisoning. This had occurred after a quarrel between her parents. Her father was accused of murder but the episode was considered to have been an accident.

Her father committed suicide a month later. This patient was then sent to a boarding school and went to various aunts for holidays. She did very well at school being highly intelligent but did not get on very well with the other girls.

She worked successfully as a mother's help to a psychiatrist for 6 months. She left this employment and went away with a married man by whom she had a baby girl. He left her when the baby was 10 months old. The man was jealous of the child, although fond of it, and she had the girl adopted when it was one year old. She said she wanted to get rid of the baby in order to get back her lover.

She subsequently married a homosexual and worked for a while as a professional smuggler and was sent to prison for a short time.

She had been making suicidal attempts by taking pills from the age of 16 onwards. She first decided to commit suicide when she was 12.

She had intensive treatment in rehabilitation centres without any real improvement. It was felt that some relationship was able to be made with her and she was maintained in the out-patients department for 5 years during which she worked as a clerk in market research.

In the course of psychotherapy this patient was very clear about her antagonism to her mother, especially after the birth of her sister when this patient was 3.

She seems to have been conscious of fairly persistent death wishes before her mother actually died.

This patient committed suicide by taking barbiturates in 1959. The pattern of this unfortunate woman's life seems to have been persistent rejection of anyone she loved since the death of her parents. For her there seemed to be only one way out.

The other patient, Case No. 18, had also been bereaved in childhood but had managed fairly well until she encountered a situation in a love affair which resulted in the suicide of her lover's wife necessitating an almost retributory suicide on the part of this patient.

Case No. 18

A 51-year-old married secretary, no children, complaining of depression, insomnia, agitation, inability to concentrate, "My brain is going to snap—I am afraid I will have to commit suicide."

A highly competent, intelligent secretary, she had been having an affair with her boss for some years. His wife found out and committed suicide. Following this the patient developed the thought that she must herself commit suicide. Her father died when she was 10 and she was very strictly brought up by her mother and stepfather.

She had been married for 20 years but had no children.

This patient had been incapacitated for 3 weeks before she was first seen in out-patients department. Her admission was arranged and she had E.C.T. with temporary improvement.

Her dilemma was that she had not wanted to give up her job and could not adjust to another one but yet was unable, emotionally, to tolerate this job in the presence of her boss with whom she had had an affair.

She was admitted 4 times to mental hospitals in the course of 3 years and received E.C.T. and largactil but improvement was only temporary and she committed suicide.

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A CONTROLLED CLINICAL TEST OF A NEW PSYCHOLEPTIC DRUG (HALOPERIDOL)

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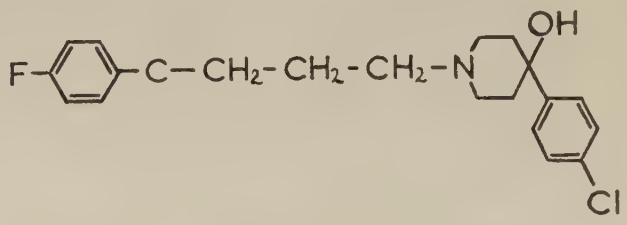
THE introduction of the new psychopharmacological agent haloperidol (R 1625, "Serenase" [R]) to psychiatric therapy provides an interesting supplement to the chemotherapeutic outfit available for the treatment of psychoses. It seems to be the first compound possessing neuroleptic powers of at least the same degree as the drugs used so far, in spite of a chemical structure quite different from reserpine and the drugs of the phenothiazine group.

The chemical composition of haloperidol is that of a tertiary amine with the formula:

4′-fluoro-4-[1-(4-hydroxy-4-(4′-chloro)-phenyl-piperidin)]-butyrophenone.



In pharmacological experiments haloperidol has shown a depressant effect on parts of the central nervous system similar to the more potent phenothiazines, but differing from these in several aspects, one being the lack of adrenolytic effect. The mean lethal dose (LD_{50}) in mice is 20–45 mg. per kg. During chronic toxidity tests rats have been able to stand 10 mg. per kg. for 134 days without pathological changes (1, 6, 7, 11).

A number of clinical reports describe Haloperidol as a neuroleptic drug of great potency. It has proved valuable in the treatment of psychomotor agitation, the sedative effect in cases of acute mania being almost specific.

Reports on the effect on chronic psychoses are more restrained, but several investigators claim a symptomatic improvement in cases of chronic schizophrenia, responding unsatisfactorily to previous treatment.

All investigators describe the presence of neurological side-effects of parkinsonian or excitomotor nature, but usually it seems possible to avoid these by careful dosing (2, 3, 4, 5, 8, 9, 10, 11).

As no controlled tests have been published so far, we have found it useful to extend our clinical experience with a placebo test according to the double-blind method, being aware that such an investigation might suffer from several sources of error or even prove impossible to complete, considering the special qualities of haloperidol.

Material and Technique

The patient material consisted of 36 schizophrenics, 16 females and 20 males. They had all been in hospital for several years, and the results of various well-known psychopharmacological agents were unsatisfactory. Only such patients were included as were not expected to become dangerous to themselves or to cause serious trouble to the ward during the preliminary period without medicine or during placebo periods. Moreover patients over 65 years were excluded because according to previous experience elderly patients are relatively more likely to develop side-effects. The age distribution is shown in Table I.

Table I

Age Distribution

	30–39 Years	40–49 Years	50–59 Years	60–65 Years	Total Patients
Females ..	3	2	8	3	16
Males ..	5	5	9	1	20

In order to eliminate the effects of previous drug treatment, all administration of psychotropic drugs was stopped in the first instance and as few soporifics as possible were used during a period of three weeks.

Symptoms from the extrapyramidal motor system are frequent side-effects in haloperidol treatment, and the appearance of these would tend to reduce the blindness of the test. Consequently all patients had a dose of the anti-parkinson agent benztropine-methanesulphonate (Cogentin). This was commenced as early as the three weeks' preliminary period so that the patients might be observed on Cogentin alone. The 24-hour dose was generally 2–4 mg., but a few patients had a little less on account of trouble with their eyesight or dryness of the mucous membranes.

During the test placebo and haloperidol were identical as to taste, appearance and packing materials, bottles of 15 ml. being used. The number of drops was 20 per ml. The haloperidol concentration was 2 mg. per ml. Only peroral administration was used.

The factory delivered for each patient a numbered package containing 10 bottles marked A to J, indicating the order in which they were to be used. The code was worked out by the factory, which kept it secret until the investigation had ended. Bottles of placebo and haloperidol were placed at random in each package. However, the patients always had at least two bottles of the same contents in succession. This was to eliminate the overlapping of the pharmacological effect when changing from drug to placebo. As each bottle sufficed for 3 or 4 days, each period of placebo and haloperidol was of at least one week's duration. In nearly all the patients the dose was 4 mg. twice per 24 hours.

The state of each patient was registered twice a week, both during the three weeks' preliminary period and the actual test period. The registrations of each single patient were carried out by the same doctor during the whole investigation, one of us observing all the female patients and the other all the male ones.

The schedules contained the following headings for behaviour: the patient's capacity for washing and neatness of person, dressing and eating, control of urination and defaecation, and work. In order to assess the psychic condition the following factors were registered: contact, sociability, aggressiveness, hallucinations, delusions, motility, and mood. Lastly any side-effects were

registered, especially symptoms from the extrapyramidal motor system and the autonomic nervous system. All registrations consisted of a quantitative assessment of all the factors mentioned, 0 meaning normal conditions or absence of side-effects respectively, and +, ++, and +++ increasing degrees of abnormality or side-effects respectively. Finally a summary assessment of the patients' condition was entered in their casebooks at regular intervals.

Results

During the investigation each patient had 10 bottles of haloperidol or placebo, respectively. After the test a comprehensive assessment of the therapeutic effect of each bottle was made on the basis of the casebooks and the registration schedules. We did not receive the code of the contents of the bottles until the assessment was finished. Ten bottles less than we had planned for were used (350 out of 360) because two patients asked to be discharged before the end of the investigation and one had to be excluded because he suffered so much from his psychosis that it was no longer safe to continue blind treatment.

Table IIa

The Total Material

36 Patients	Placebo	Haloperidol	
Positive effect	56	103	f=1. χ^2=7·08. 0·01>P>0·001
Negative effect ..	116	75	f=1. χ^2=5·85. 0·02>P>0·01
Total number of bottles	172	178	350

The therapeutic effect of all the 350 bottles which were tested is given in Table IIa, which shows that when treated statistically the number of bottles of haloperidol with a positive effect is significantly greater than the number of bottles of placebo with a positive effect ($P<0·01$). The difference between the number of bottles of haloperidol and placebo with a negative effect is less pronounced ($0·02>P>0·01$).

During the test we became aware of certain technical problems.

Primarily it was observed that a considerable number of patients only displayed a relatively small variation of symptoms. Thus there was a number of patients whose condition did not vary greatly during the three weeks' preliminary period without medicine. We therefore found that it would be useful to segregate a subsection comprising the patients who had displayed the most conspicuous variations of symptoms during the test.

As such a subsection was expected to include patients who were particularly responsive to haloperidol, we presumed that the difference between the effect of haloperidol and placebo would be more pronounced in this subsection than in the total group.

Table IIb

Reduced Material

13 Patients	Placebo	Haloperidol	
Positive effect	24	47	f=1. χ^2=3·19. 0·1 >P>0·05
Negative effect ..	27	24	f=1. χ^2=4·18. 0·05>P>0·02
Total number of bottles	51	71	122

The results of this subsection are computed in Table IIb, from which it appears that contrary to our expectations the difference between the therapeutic effect of haloperidol and placebo is less pronounced than in the total material and is no longer significant.

From further examination of the individual patients of this subsection we found that frequent changes from the active to the inactive compound had caused more overlapping of the pharmacological effect than originally expected. This phenomenon would tend to level out the difference between the two compounds and in this manner obscure the therapeutic results, so we found it desirable to undertake a separate assessment of such patients as had taken the same compound for relatively long periods. at least three or four weeks. The influence of the overlapping was expected to be comparatively small in these cases. This subsection was segregated solely on the basis of the code, without consideration of the changes in the patients' symptoms.

TABLE IIc

Long Periods

12 Patients	Placebo	Haloperidol	
Positive effect	15	35	f=1. χ^2=16·86. P<0·001
Negative effect ..	43	19	f=1. χ^2=13·98. P<0·001
Total number of bottles	58	54	112

The results of these cases are shown in Table IIc. It will be seen that now there is a significant difference between the haloperidol and placebo figures for both the positive and negative effects, besides which the significance of the positive effect is more pronounced than in the total material.

On the basis of the registration schedules mentioned above we have tried to assess which of the schizophrenic symptoms have shown the best response to haloperidol.

In patients responding to this compound we usually found good recession of specific psychotic symptoms such as hallucinations and delusions, while a general sedative effect was less pronounced. Cases of agitation with hypermotility and possibly also mania seemed to be those in which response was most easily obtained.

In connection with a blind test such as the present investigation we considered a systematic assessment of the side-effects as irrelevant as a matter of principle. In spite of the administration of Cogentin slight symptoms due to the extrapyramidal motor system were observed in a few patients. We did not note any other symptoms which with certainty might be ascribed to haloperidol. The question of side-effects has moreover been treated extensively in the literature on this compound already available (2, 9, 11).

SUMMARY

A double-blind test of haloperidol was carried out on 36 patients. Haloperidol and placebo alternated so that each patient acted as his own control. Haloperidol was found significantly better than placebo. The discussion of technical problems established the desirability of administration of the active compound and placebo for relatively long periods, in order to reduce as far as possible the overlapping effect of the two periods.

Acknowledgment

Messrs. Lindeburg & Riemer have most readily placed experimental material at our disposal and worked out the code.

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THE TREATMENT OF RESTLESS PSYCHOTICS WITH METHOTRIMEPRAZINE (VERACTIL)

By

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Introduction

Since the introduction of methotrimeprazine (Veractil) to psychiatry in 1956 by the French workers, Sigwald, Henne, Bouttier, Raymoneaud and Quetin (1), this drug has been used here and on the Continent for the treatment of various psychiatric conditions with varying and inconsistent success. A rapid review of some examples in the literature will suffice to illustrate this. Deschamps and Madre (2) stated that the drug was more rapidly effective and more powerful than chlorpromazine (Largactil). Gayral *et al.* (3) reported on their findings in 409 patients, most of them (304) out-patients, and the majority (316) with depression: it was considered that Veractil was not an adequate substitute for electroplexy (E.C.T.) in depression. Larue and Gosselin (4) treated 82 patients with a variety of disorders including 2 cases of trigeminal neuralgia, with marked success. Letailleur, le Borgne and Lebrun (5) reported the side-effects of drowsiness and fainting to be relatively common, but with no true Parkinsonism, in a series of 75 patients of which they regarded 36 as cured and 25 as improved. Baruk, Launay and Roberti (6) claimed good results, not only in depression, as stated by others, but also in obsessive and digestive neuroses; and in patients with syndromes in which other neuroleptics were usually without effect. Deschales, Lanteri-Lausa and Fargeon (7) however concluded that Veractil was no more efficacious than other neuroleptics though they preferred it for depressives: it could usefully be combined with E.C.T. in these cases but it could not replace it. Baker and Thorpe (8) found no difference in comparison with Largactil while treating deteriorated schizophrenics, except that the effective dose of Veractil was only two-thirds that of Largactil. Leitch and Seager (9) found no statistical significance in a placebo-controlled study comparing Veractil, Largactil, acepromazine and promazine. But Quinn, Johnston, Latner and Kiloh (10) again reported a 42 per cent. clinical improvement in patients given Veractil compared with Largactil and a placebo in 146 schizophrenics using the working capacity in males and the degree of deterioration in females as pointers for assessment.

Intention

As a result of these studies, and the good results obtained in this hospital in the treatment of a scattered number of "Largactil-resistant" patients; it was decided to reassess this drug from a fresh and specific viewpoint; that of its capacity to reduce restlessness, aggression and general psychomotor disturbance; thus laying emphasis on the motor component of psychotic behaviour rather than the overall effect as described in previous trials.

Method

Female patients were selected on the basis that Largactil in doses of up to 100 mg. t.d.s. failed to control their restless, aggressive, psychotic behaviour. They had to be closely supervised, prevented from wandering or actually making off from the wards, and required heavy sedation and/or E.C.T. to modify this activity satisfactorily. All wards in this hospital are open and the environment is one of nursing care and observation together with occupational and social therapies. The patients so selected were rated on a ten-point scale as follows:

(*i*) Restlessness
(*ii*) Irritability
(*iii*) Sleeplessness
(*iv*) Hallucinations
(*v*) Delusions
(*vi*) Aggressiveness
(*vii*) Unco-operativeness
(*viii*) E.C.T. requirement
(*ix*) Agitation
(*x*) Noisiness

The values of 0, 1 and 2 were given according to the absence, presence or marked presence of these factors respectively. It will be noted that these factors were assessed by the rater by his observation alone and not by questioning the patient; e.g., hallucinations were taken to be present if the patient was seen to be talking to herself, and delusions were assessed in accord with her spontaneous remarks. Thus the scale is a measure of psychomotor activity with the emphasis on "motor". Administration of Veractil was started at 25 mg. t.d.s. initially, except in three cases that were so disturbed that they were started on the same dose intramuscularly. Ratings were then carried out every third day until no further improvement was noted. The dose was also adjusted to get maximum effect without making the patient sleepy. In order to eliminate any coincidental improvement and make each patient her own control, when behaviour became stable, Veractil was withdrawn and deterioration, if any, noted. The drug was then re-administered and the response reassessed. Cases that did not deteriorate after four weeks were rejected as coincidental improvements. Cases that, having deteriorated after withdrawal, failed to respond to re-administration were also rejected.

Results

Number of patients, 48. Sex—female. Age (average) 62 years (range, 22–84).

Diagnostic and Rating Table

Diagnostic Group	No. of Points	Average Initial Rating	Average Final Rating	Failures
Paraphrenia	2	11	5	Nil
Schizophrenia	17	12	3	2
Subnormality:				
+Paranoia	1	12	2	Nil
+Schizophrenia	3	16	5	1
Dementia:				
Senile	6	13	4	1
Alcoholic	1	11	3	Nil
Depression with agitation	8	8	3	Nil
Cerebral atrophy	1	14	12	1
Huntington's chorea	2	12	4	Nil
Head injury	1	11	0	Nil
Epilepsy with psychopathy	1	18	5	Nil
Mania	4	12	6	1
Schizo-affective	1	10	8	1
	Total 48	(Mean) 12	(Mean) 4	Total 7

Maintenance Dose—(average) 50 mg. t.d.s. orally.

Range and distribution:

25 mg. b.d.	1	50 mg. t.d.s.	21	100 mg. t.d.s.	2
25 mg. t.d.s.	13	75 mg. t.d.s.	10	700 mg. daily	1

Side-Effects

Excessive drowsiness, necessitating reduction of dosage, 2 cases.

Dizziness, due to postural hypotension which was transient, 10 cases.

Failures were 7, and were considered so if the final rating did not show a reduction of 3 or more from the initial value—a margin of 2 was allowed for rating error.

They included a case of mental subnormality plus schizophrenia that required such large doses that the patient became too sleepy; one of senile dementia who had to have E.C.T. as well, and a case of mania upon whom the effect of Veractil was only of a few days' duration.

There were also five patients who did not relapse after Veractil was withdrawn. No cases that deteriorated after withdrawal failed to respond again.

Successes, of which there were 41, showed that on statistical treatment of the ratings, and their distribution the "*t*-test" gave a value of 11·8 when P=0·01. With this number of patients *t* had to be more than 2·68 to be significant.

Discussion

It appears that Veractil is effective in the treatment of restless disturbed psychotic female patients who would require E.C.T. and upon whom Largactil has had little effect. This result agrees with some other workers, and moreover where it differs, it would seem to be due to the criteria for which the ratings were given, i.e., the emphasis being placed upon the reduction of overt activity without any attempt being made to assess sociability or degree of deterioration. Criteria were essentially those of motor activity, this being an outward indication of the patient's psychotic state, and the scale used reflected this aspect: delusions and hallucinatory phenomena being observed as behaviour, and thus assessed as motor activity also.

Doses required were mostly in the higher levels, and in one case up to 700 mg. daily; the average for maintenance being 50 to 75 mg. t.d.s. The absence of side-effects is to be noted, and although the average age of patients was 62, hypotensive trouble was fleeting and never serious. Drowsiness was a feature in some cases and the dose had to be reduced as a consequence. Most cases of dozing in the daytime wore off after a few days. The absence of parkinsonism, as compared to its occurrence in Largactil therapy, is noteworthy: this is confirmed by the work of Telatin and Maccagnani (11). There was also a considerable delay in the onset of effect and it is therefore advisable to give Veractil a trial of (say) two weeks before abandoning it. A case of Huntington's chorea was interesting: this woman had been singularly resistant to all forms of treatment for her noisiness and aggressive characteristics, and had been given frequent E.C.T. Having been placed on Veractil she has not required E.C.T. at all and she has even been home for week-ends with her family again.

The advantages of a drug that avoids heavy sedation or repeated E.C.T. in a disturbed restless wandering patient in these days of open doors and nursing shortages is apparent.

It is almost pointless to mention that the environment, together with the attitude to, and handling of, the patient by the nursing staff is also most important when patients are as disturbed as these were in this series. Faulty approach and behaviour in this respect can obscure the response of the patient and necessitate needlessly drastic measures.

The recent work of Haefner, Sacks and Mason (12) on the physician's confidence in a preparation and the influence this has on first of all prescribing it, and secondly selection of dose to be given, must be remembered in assessing the final position of Veractil in psychiatry.

Summary

A controlled trial of Veractil, in an environment of open hospital wards with nursing, occupational and social therapy, with 48 cases of restless aggressive psychotics that did not improve with Largactil, and for whom E.C.T. would have been necessary, showed that this drug effectively modified the behaviour, in a statistically significant manner, of 41 of them.

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GROUP RESORT TO PHANTASY

A FIELD STUDY

By

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Preamble

Resort to the use of phantasy in conditions of stress in individuals and in groups was a preoccupation of the author in 1944 (1). The fact that the subject was in mind occasioned the discovery of a "psychological epidemic". The affairs to be described sound trivial, but have been thought needing of record as a factual account of group infantilisms which, although doubtless of common occurrence, are not much documented. The passage of fifteen years was thought proper to minimize chance of recognition of any people concerned, but this does not affect the validity of the observations. At the expense of some obscurity, cyphers are used to designate individuals and other clues to identity have been avoided.

A community of some fifty men and women living in an isolated large country house and busily engaged in a wartime task came to experience complications of morale relevant to the emergence, perpetuation and spread in their midst of imaginings of two "animals", a "dog" and a "horse". It so happened that the community fell naturally into various groups and it was observed that the spread of these phantasies took place within certain groups, yet not in others, this being related to the differing characteristics of the groups. The imaginings of the "animals" showed similarities and differences as between individuals, which provided clues as to their significances to these various persons.

The formations of the groups within the community were as follows. There were those persons of official capacity, those in clerical work, and those in general services (catering, cleaning and so on). The officials formed two groups, junior and senior, sharply differentiated from each other by status and living quarters. The clerical side was also in two groups, the general and the technical, working in two separated offices. These constructions can be indicated as follows:

Group	Cypher	Constitution
Official, senior	SO	10 members, all men
Official, junior	JO	7 members, 2 of them women
Clerical, general	GC	7 members, 1 a man
Clerical, technical	TC	6 members, 1 a woman
General services	GS	30 members, 6 of them men

Eight of the officials were members of two groups, of one by virtue of status and living quarters, of the other group by work associations. Individuals will be identified in the text by their group cypher (or cyphers, if a member of two

groups) followed by a numeral. These numerals have been allotted serially within their group to each person as they become mentioned.

The five sections of the paper now to follow deal in order with the nature of the manifestations, the dynamics of the group spread, the morale stresses which provided the basis from which these phantasies sprang, the imaginings of the "animals" as supposed by various individuals, and the psychodynamics which motivated these manifestations.

Manifestations

The "Dog"

The manifestations sprang initially from a male junior official (group cypher JO), a member also of the technical office group (group cypher TC)—(whose designation thus becomes JO1/TC1). He had in 1941 been briefly a member of an isolated community in a dreary area. He there saw a man bringing into the company his "dog" (that is, a creature wholly imaginary), whereupon the play took the form of the trailing of a length of string, whistling, patting and so forth. In February, 1944 this junior official, JO1/TC1, whilst in the technical office, happened to pick up a yard long piece of string by an end, there being some metal rings tied to the other end. He at once thought of the "dog" of 1941, which he had only occasionally recalled in the meantime. He then trailed this string and rings to the general office, where his work frequently took him. The women clerks said, "What have you got there?" and he replied, "I've got a dog". They then cooed and pressed around him saying, "Oh, have you—what do you call him?" The "dog" was henceforth always referred to by the facetious name thereupon spontaneously coined by the man. Another junior official, the woman in charge of the general office (whose designation thus becomes JO2/GC1) then said, "Let's make believe we really have got a dog —isn't that a good idea?" She indicated that the intent would be to annoy the supervisor of her office, a male senior official, SO1/GC2, who worked in a separate room. He had recently forbidden the retention of an actual pet dog in the office. During the first month of its creation, the fanciful dog was "taken" by its originator almost every day to the general office and, less often, to the junior official quarters. After the initial active phase he almost forgot the matter, but occasionally a clerk in the general office would make enquiry, being then told that "so-and-so" (the name was always used) was tied up in the technical office. The "dog" was again materialized in the general office a few times by him three months later at the more pressing enquiries of one of the clerks, GC3. In the technical office this phantasy persisted in its most developed extent right up to the time of this investigation in late July. In both offices it was kept encouraged by the women, though in each created by the man JO1/TC1. In the technical office it became appended to the woman, TC2, more even than to the men, but in the general office (which was visited also often by TC2) play with the "dog" continued lively only so long as one of three men was present. These men were JO1/TC1, and rather later JO3/TC3, with JO4/TC4 playing a distinct part in the very earliest days until he left the community. JO1/TC1 ran a kind of tuck shop at the technical office, to which came personnel from many parts. By this route persons of all groups, except senior officials, became exposed to the dog myth, mainly through TC2 who continually drew attention to it. JO1/TC1 once trailed the string up to the kitchen, but felt rather foolish since no one took any notice, although by that time catering staff had experienced frequent contacts with the "dog" at visits to the shop.

The "Horse"

In April, 1944, JO3/TC3, the other of the male junior officials then working with JO1/TC1 as from the technical office, produced a rival attraction in the character of a "horse", which was also invariably known by a special title. JO3/TC3 said (in a written account) "I was aware of my colleague's possession of a dog—which pet aroused great interest, yea, almost excitement, in the breasts of all around. So much so that they would flock about it, caress it, encourage it, smother it with pats, and enquire diligently *re* its habits and propensities. Indeed a covetous possession. Could I not own such a focus of kindly attention? God knows, I needed it". He had, to his knowledge, never previously seen another person pretend to have a horse, but thought of it on noticing a mounting stone near the technical office when about to go out to a cinema with JO1/TC1, TC2, and another woman, a junior official in charge of a general services section, JO5/GS1. On the trek to the station they all played with this creation. JO1/TC1 and JO5/GS1 "riding". The "horse" then came also into the train and cinema. Subsequently it was occasionally referred to amongst the junior officials in their living quarters and appeared again on excursions. It was also propagated to visitors to the shop, again especially by TC2, although much of the time it was supposed to be living in nearby stables. JO3/TC3 took his production around to the general office from earliest inception, where its reception, though quite decided, tended to be less wholehearted and less universal than with the dog idea. The vogue of the "horse" followed much the same course as for the "dog", waxing in the earlier weeks (especially in the general office), waning then everywhere except in the technical office where it persisted up to the investigation.

Commentary on Group Dynamics

Spread of the two phantasied animals was nil for the senior official group, nil for the general services group, maximal for the technical office and for the general office, and moderate for the junior official group. Of these groups, the first two might be termed "rejective", the last three "acceptive" in relation to the phantasies. As it happened, except for the general services, the sizes of all of the five groups (six to ten members) were optimal for group effects to become intensified to either the "rejective" or the "acceptive". The spread was decided chiefly by characteristics within the several groups, less by degrees of possibility of meetings between personnel of those groups.

The forces of group formation were by community of task, sharing of work quarters, sharing of living quarters, and (in some) common status. The senior officials were bound by status, common living quarters, and community of interest, but were very mobile. They were differentiated, and conjoined as a group, also by the fact that their average age was a decade greater than with any other group. The general services personnel were employed on various jobs and some were relatively mobile. The technical office and general office groups were by far the most closely contained, in each by reason of restricted working area and community of task. The junior officials were thrown together by status emphasized by the fact of occupying restricted living quarters.

Since it appeared that the play was stimulated by admixture of the sexes, the sex constitutions of the groups may have had influence on the spread. The senior official group alone was all male—a factor which, with several others, was possibly connected with the non-spread to that group of these phantasies

born of males. The general services group was mixed, mostly female. The technical office had males and one female. The general office staff was wholly female excepting the one senior official, who took no part in these matters. The junior official group was admixed.

The spread of the phantasies might have been modified by the frequency of personal meetings. Most of the senior officials had only limited contacts with a few of the community. The senior officials did not patronize the shop at the technical office, and the three who did participate directly in the work of other groups were all markedly more assimilated to the senior official group than to their sub-groups. In the large mixed general services group, such personnel as drivers and cleaners had few contacts with each other or with others of their group, but some, such as catering and cooking branches (all women), were continuously associated in the course of their work.

Whilst these phenomena were initiated by individuals, they immediately spread within certain groups. So far as could be ascertained, the images persisted as actively metamorphosed only when more than one person was present. In other words they constituted inter-personal linkages amongst those disparate personalities who were preforce closed together within the community, most intimately in the various groups. The instigator could be thought of as a "carrier" in that he had for three years contained a subconscious trace of his contact with a similar "epidemic", which becoming reactivated then "infected" those groups whose receptivity was in itself a causative factor in this reactivation.

A main purpose in the origination of the phantasies was to create an impression amongst other people, these other people being in reciprocal need of a route of expression of emotions. Phantasy enabled experience of emotions to occur in an interpersonal setting, if only on the limited and even distorted plane of infantilisms. For this purpose a merit of the infantilism appeared to be its universality of appeal, its capacity for imitation, which when sensed by a group as valuable in providing a "bridge" capable of usage by all the varied personalities, was then encouraged to arise and to persist. Its ebb was possibly associated with a progressive investment of the phantasy with personalized tensions, the result being that it less and less served as a neutral catalyst. The continued drive to efforts at a more mature grappling with problems rather than their shelving by resort to infantilisms was conditioned by the extent of the stresses, these being the conjunction on the one hand of the degree of need for the maintenance of group ties, and on the other the degree of intra-group tensions.

Just as the ebb of participation appeared in part linked to an investment of the myths with personalized tensions, so any phantasy creation which was at the outset too personalized might in whole or in part fail to be adopted by a group. Many details of the "horse" failed to become so adopted as being too peculiar to their originator, less domestic, less infantile, less comfortably appealing to others for them to become effectively accepted. Yet certain selected aspects (strikingly the same with all persons) were lifted out and perpetuated as serving the purposes of the acceptors as well as of the originator. Probably those features of the symbol which were not taken up were by the originator half not expected to be generally accepted—they were offered and yet withheld —it being perceived that should such deeply personalized aspects be too much pressed upon others, then the whole might fail also. The extent of this tentative forward movement and withdrawal would vary as between different individuals, but could be much less in groups with a mutually tacitly agreed need for the

neutral ground of broadly alike features. The author has elsewhere remarked upon states of personal distress as coming for solace by resort to phantasy creations, which creations were so individual as to have relatively little extension in interpersonal relationships, being shared only very reservedly where much of the group or society was unreceptive and likely to be hostile and derisory towards the myth (1).

Morale Background

The indications of the morale setting are here not followed within the senior official group since it was found that the phantasms had never become imported into that group.

The instigator of the epidemic, the man JO1/TC1, had decided emotional stresses, but we may take it that he would not have been so encouraged to perpetuate his phantasy, or even to allow its birth, had not maladjustments existed also in groups around him. This investigation disclosed that in the months just before the emergence of the two phantoms, a surprisingly high proportion of the people in all groups had active personal problems. It was also evident that the "hot house" atmosphere ensured that these personal stresses exercised a collective impression.

In the winter 1943–44 there was an *affaire* between the male junior official JO6 (the senior in his group to the others) and a woman of the general services group, GS2. This caused furious offence to the other junior officials, since there were numerous clandestine visits of GS2 to their quarters at all sorts of hours. Eventually JO1/TC1, JO4/TC4 and an administrative junior official, JO7, went as a deputation to a senior official. By this action the junior official quarters were put out of bounds to any not of that group, and GS2 was sent away. Unfortunately, knowing nothing of this deputation, JO6 blamed one of the two women junior officials, JO5/GS1, who was the supervisor over GS2, and for a long time he would barely speak to her. In this bad humour he stirred up jealousy between the two women junior officials in relation to their possible promotions and interfered with the work of the woman general office official to a degree where she asked her supervisor to intervene.

JO3/TC3, he who later originated the "horse", arrived to take over the work of JO4/TC4 who left shortly afterwards. This arriver was in a despondent state—he having departed from his last job under reprimand, which in his view was absolutely unjust. JO4/TC4 had been a good friend to JO1/TC1, and JO3/TC3 was in no shape to fill his place. At this time also the regular weekend visits home (some eighty miles distant) made by JO1/TC1, had to cease because of changing war conditions: as also those of numerous others. These technical personnel, JO1/TC1, JO3/TC3 and JO4/TC4, were earnest well-intentioned men doing their utmost to keep up their often woebegone spirits and those of others.

JO4/TC4 in the month prior to his departure had associated with a woman clerk, GC4, whose sister GC5, working in the same office with her, then took umbrage at this intrusion. The later departure also of GC5 left GC4 so lost as to be impaired in health. These sisters were both unmarried, as indeed were the majority of the female staff.

The woman junior official who was supervisor of the general office, JO2/GC1, was deeply distressed in late 1943 and over all the relevant period of 1944 by extreme difficulty with families about her engagement and eventual marriage to a foreign man of different religion. She also had much trouble over finance with her mother and by the circumstances of war had not seen her

husband since the honeymoon. GC3, an emotional young woman with marked domestic worries, was much under the wing of JO2/GC1.

JO7, a stores manager (earlier referred to as a member of the protest deputation) often fell foul of the senior of the junior officials, JO6, and took every opportunity of siding with any other junior official against him.

Less detail was to be known of the general services group. Their junior official supervisor, JO5/GS1, reported that their morale was uniformly high, little squabbles quickly fading away. She said that her women treated themselves and the world in a robust manner. Of the twenty or so female members of this group, three (probably four) had within the last four months left by reason of illegitimate pregnancy.

Personal Imagery

Eleven persons were interviewed, and were incidentally asked to give their own ideas of the "animals". They were four male and two female junior officials, four general office female clerks, and the technical office female clerk. The senior of the officials, JO6, protested his lack of interest in the affair, though he had been aware of it. He thus advanced no descriptions of any ideas he may have formed. The concepts of both phantasies by the man JO7 were quite different from those of other people. Otherwise the various mental pictures of the "dog" and of the "horse" were closely similar. They were doubtless similar also with participators not interviewed.

The originator, JO1/TC1, had in his later childhood owned a small black and white lively terrier. He thought of his now imagined dog as of similar appearance and disposition. Excepting JO7, and perhaps JO6, each of the rest had imagined the "dog" similarly as small and black and white. To the clerk GC4 it was a "dejected puppy", but to all the others it was playful and full grown. The childhood dog of JO1/TC1 had been a bitch, but he had not specified the sex of his creation. To the man, JO3/TC3, it was female; to TC2 the sex was not decided; with all the remaining six women it tended to be male, never female. Several of the women had dogs at their homes—in no case anything at all like their phantasy. Two had heard of the dog idea elsewhere. The father of TC2 had, long before, told her of soldiers in India keeping "dogs", and GC4 had, in 1940, heard in a letter of soldiers in Singapore with "dogs".

With the "horse", again except for JO7, the concepts were also much alike. The originator, JO3/TC3, had a construct of elaborate detail in both mental and physical attributes, but most of these numerous peculiarities were never represented in the thoughts of the other persons. JO6 claimed to have formed no special idea of the "horse", GC6 and GC7 had not visualized it at all. The remaining six of those interviewed gave descriptions which differed but little one from the other. They all thought it large, docile and old. To all it was brown in colour except only JO2/GC1, to whom it was black. With the eight people who had formed horse images the sex was conceived of as follows. All the women saw it as specifically male, JO2/GC1 being less definite but still veering to the male. The man JO7 described it as female. The two men JO3/TC3 and JO1/TC1, thought of it as male, but not pointedly so.

To JO7, whose work took him to the edges only of all the groups (though living in the junior official quarters), the dog idea was "a big well-kept animal —a red setter or an airedale". The "horse" to him would be "a chestnut mare, slender and well-groomed".

The author possesses three drawings which had been made before his arrival. Two are of the "dog"; one, by GC4, shows her "dejected puppy"; the other, by TC2, shows her imagination of the shop—an olde worlde front, at the door of which the man JO1/TC1 is portrayed as a bonneted female (a "grannie") and the dog is shown as little, black and white, and having one ear cocked up. The third drawing, by JO3/TC3, is of his "horse"—a ludicrous picture showing some fifteen special features all described by him as of particular significance.

Commentary on Psychodynamics

The behaviour of the originator, and to a less degree of each participant, could be seen as a blend of mocking and being mocked, both these attitudes being at one and the same time adopted by actor and audience. The phantasy served as a testing ground for the exploration and expression of cathartic emotions. The interpersonal and (intrapersonal) tensions were kept camouflaged but expressed obliquely through the playfulness of the "tamed" phantasy creature. This play achieved the further objectives of the collectively desired relief from organized discipline and of escape into a fleeting sense of idealized childhood domesticity.

In these childlike games the "animals" seemed sometimes to convey a maternal feeling. This last aspect was most evidenced within the technical office where the close daily association of the only woman, TC2, with the men JO1/TC1 and JO3/TC3, enabled the more tender elements to become more explicit. Both phantasies were treated by TC2 as if they were like her children, just as much as like her companions or parents. They were of no special sex with her, unlike with the women of the other groups. Her drawings of the "shoppe" has an aura of sugary snugness, and she indicates both her mother yearning and the motherly need of JO1/TC1 by her representation of him as an elderly female. The "dog" and the "horse" did not absorb all her aroused "little mother" impulses and she on her own account placed in her office baskets imagined to contain families of "rabbits". To the women other than TC2, the "animals", whilst again facilitating the playing of the "family game" yet being practically wholly male in conception, were perhaps partly parental (the "horse" especially) but more often conveyed a feeling of the "friendly mate" (the "dog" especially). With the men JO1/TC1 and JO3/TC3 when beyond the technical office, the play was tinged more with the bravado of dalliance and less with filial sentiments.

In this community of mixed sexes, it was observable that the two phantasies were both created by men in the presence of women. The women in the general office and junior official group played and sustained the game fully only so long as those males remained present. It was also observed that the "dog" was to the women never female, usually male; but to the men it was rather female. The "horse" was supposed specifically male by the women, but to the men it was either not so pointedly male, or was female. The conclusion is inescapable that those phantasies served, in part at least, as strongly cloaked vehicles of expression of sexual tensions. It might be expected that sexuality would be relatively inhibited in the intellectualized clerical staff who took up the phantasies so avidly, but much less so in the robust general services personnel, who whilst producing several illegitimate pregnancies found no attractions whatever in the insubstantial "animals". It is amusing to compare the position of the originating male and the accepting females, with that of the wizard and

the witches' coven. Certainly the metamorphosis of the "animals" can be seen as magic. Were any of the "familiars" of the witches perhaps like unto the latter day creatures here described? The sexuality of witchcraft orgies, practices and myths, is plain enough. In the course of history the psychiatrist emerged as the witches flew away: in the community thus then in study these faeries took wing as the psychiatrist laid hands on them. The author became aware of these phantasies within hours of his entrance into the community, whereupon the investigations were completed with all speed. In those few days of questionings the epidemic died, never there to reappear.

Summary

1. An investigation within a community of adults of play with two imagined "animals" is described.

2. The spread of these phantasies was shown to be determined by group effects, some groups being "acceptive" and others "rejective". The group psychodynamics are discussed.

3. The emotional forces determining the emergence and distribution of this play are indicated.

4. The concepts of the phantasied "animals" as held by various individuals are given. Their relevance to the psychodynamics of affected individuals is discussed.

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THE YORUBA IMAGE OF THE WITCH

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WITCHCRAFT, the extra-natural interference in the welfare of the community by women, has long since ceased to be a source of major concern in Western society. In many other areas of the world, however, the witch remains a very active and vital image in the consciousness of the people, This is certainly true for the Yoruba*—a negro group occupying large areas of Nigeria, Dahomey and Togoland along the north-west coast of Africa. With the Yoruba (irrespective of his social level, religion or education), belief in the witch and in her powers is all but universal.

The study of witchcraft, both as it exists in contemporary cultures and as it has existed in the Western community at different periods in the past, raises a number of interesting questions for the student of psychology and sociology. If witchcraft is not a genuine phenomenon, why is the witch fantasy so prevalent in so many different cultures throughout the world? What is it about the human female that provokes such similar pictures of her magical malevolence in such diverse cultures? What changes have occurred in Western culture that have allowed the witch fantasy to lose its erstwhile potency? A study of the witch as she exists today among the Yoruba may help elucidate these problems.

THE WITCH IN YORUBA THEOLOGY

Yoruba legend has it that certain women once went to the malevolent trickster god Eshu to ask for the power of witchcraft. Eshu was willing to give it to them but he had to refer them to Orunmila, the god of Fate. Orunmila would not allow them to go out into the world with the power of witchcraft until they promised to honour certain signs and materials to serve men as protections against their power. They agreed to this but it was necessary for them to go on to Olorun, the Lord of all, to make their agreement binding. This transaction is mentioned in certain ancient Ifa verses of unknown origin which are used in divination.

"Idi ogbungbun, aworo niye,
They went to Alara's house and kill him,
They went to Ajero's house and kill him,
They went to Orangun's house and kill him.

You pluck the Okro of Ejiwo
You eat the Camwood of Ailoran
You kill the stammering water of Owu.

* For further anthropological and psychiatric data on the Yoruba see Lambo (1955, 1956) and Prince (1960 a, b).

When Eshu came, you left for a place in the sky and it received you not,
Then you went to Orunmila and when you got there, you greeted him and he asked you where you were going.
Then you said you were going into the world to be killing people and to be debarring their progress.

Then Orunmila said that he would not allow the gates to be opened unto you, unless with a very solid agreement.
Then you said he should get the ram's horn, tortoise's shell, the long spine of the porcupine, fowl's feather and soap.

Because nobody will ever eat the tortoise with the shell
Nor the ram with the horn
Or the porcupine with the spine
Or the fowl with the feathers,

It is a forbidden act to eat soap.

Then Orunmila said that he alone cannot open the gates for you, unless you go to the almighty God, when you got there, you explain yourselves to Him.

Then the almighty God said:

'Spittle once out of the mouth, will not come back to the mouth again,
The grass that the elephants tread will never rise again,
Therefore you must not change your agreement

And anybody with this sign on should be honoured'."

(Ifa Odu, Idi Meji)*

The Nature of the Witch

It is clear then that in Yorubaland, witchcraft is a feminine art and has its power from Eshu, the trickster god, and was sanctioned, if somewhat reluctantly, by Orunmila (Ifa) the god of Fate, and by Olorun, the Lord of all. This power is generally attributed to older women, but young women or even girls can sometimes be involved. According to some informants, witchcraft power is a kind of immaterial substance which may be kept in a calabash hidden in a hole in the wall of the witch's house, or in a hollow tree. The power itself may be lodged in the roots of a tree or even in a young child (age 1 to 8 years). In the latter case the witchcraft power will not harm the child but, on the contrary, will protect the child from other witches as the child is serving one of them as a refuge. The red tail-feather of the parrot is used as a sign of witchcraft power, and may be placed in the calabash or in the tree containing the witchcraft power. (I have been unable to find out the origin of this use of the red feather or why it should come to have this association with the witch.)

Other informants regard the power as a more concrete substance which is present in the woman's abdomen. As one man said: "I have seen two women vomit it out. It was like a stone or a hard ball of something. They were not witches after that." Witchcraft seems generally to be held as a desirable skill because of the great power it provides; however, there is also the idea that the spirit of the witch after death becomes a restless and disconsolate ghost who wanders about the world in a distraught state. The power is usually passed from mother to daughter, but it may also be bestowed as a gift, or may be purchased. When passed from one person to the other it is often given mixed with certain foods. It is sometimes held that a woman cannot die possessing witchcraft power but must pass it on to someone before her death; in fact, she will not be able to die unless she does so.

* I am grateful to Mr. O. Obafemi, Native doctor and Priest of Ifa, for translating the above verses for me.

Perhaps some actual comments by Yoruba informants would help clarify these aspects.

"Witchcraft power is like a breeze, you can't see it but it has effect. A woman can't die possessing it—when she dies, she vomits out the invisible witchcraft and it passes to her daughter."

"A woman can buy witchcraft power or may, as well, inherit it from another person. This mostly depends on the interest or love the witchcraft woman has in the person that is going to possess it. Some people when they suffer too much, seek for this power. In this case she has to buy it. But it is very necessary, and matter of must, to give this witchcraft power to somebody before she should die. In this case, if she could not get anybody either to buy it or to give it out as a gift to her friend outside, or to have a daughter she loved that can inherit it, she has to take it to an Iroko tree that is very young. This will become a spirit in the tree. Other witches will be coming to this tree to have their meetings. It is such trees that herbalists carry their sacrifices to in case they have a patient that is seriously sick."

"Through many informants I believe that a woman may buy, inherit or be presented with this power. This is not given directly. It can be given through foods such as baked beans (Akara), Kola, Porridge, red Yam (Esuru) and many other native foods. When this is taken the power will start to grow, until when the person will start to fly in the night."

The Powers of the Witch

Witches are considered to have great power—"They are the rulers of the world, they get their power from God who gave them permission to kill. They have no mercy. They can do anything." They are said sometimes to have favourites whom they protect and make wealthy but these positive aspects are not emphasized—they are mostly spoken of in connection with their malevolence. The Yoruba word for witch is Aje and would appear to be a contraction of "Iya je" meaning "mother eat". The word Aje is in practice avoided as much as possible or at least spoken in a whisper (for fear of attracting the witch's attention or offending her). The expressions "Agbalagba" (old people), "awon iya" (our mothers) or "Awon eni toni aiye" (those who rule the world) being substituted. A witch's malignancy may be turned upon a man for almost any reason—for some slight impoliteness, or because he accuses her of being a witch, or because he is getting too high in the world or often for no reason "just because they are evil women".

One of the commonest fantasies about the powers of the witch is that she can transform her "heart-soul" (Okan) into a bird or animal. This occurs at night and her physical body remains in a deep sleep while her transformed heart-soul moves abroad. A woman who sleeps on her back with her mouth open and arms outstretched is probably a witch. She cannot be awakened while her heart-soul is abroad and if someone captures the bird or animal into which her soul has been transformed she will not be able to wake up; if the creature is killed the witch will die. Most witches transform themselves into night birds of some type . . . these have been variously described to me as "a white bird with a long red beak and red claws" or "a brown bird like a bush fowl with a long red beak". Alternatively they may transform themselves into owls, cats, rats or bats, the common feature being that these creatures are all active by night, for it is believed that witchcraft is a nocturnal thing, the witches being most active between 12 and 3 a.m. in the realms of dream and nightmare. If the witch's activities are brought into the light of day, they lose their potency, e.g., by confession. It is believed that the witch bird perches by night in a tree close to the victim's house. An owl perched in a tree near a man's house will cause considerable alarm to the householder. The actual manner in which the witch bird damages her victim is obscure but I have been told that it pecks its

victim's head or neck and sucks out his blood. There is a saying, "Aje ke lano, omo ku loni" (the witch bird chirped yesterday, the child dies today).

Witches are considered to take part in some obscure nocturnal orgies (ajo) for which one member of the witch party must supply a human child. A patient told me, "My wife is a high-tempered woman. If anything happened she would curse everyone, sometimes if she fought with someone, if it was settled whether she was wrong or right she would argue for three days. If I corrected her she would always argue. She has a twisted foot. One day she pointed at a place in the farm and said there had been a great feast there last night but I had not heard of it. When I asked her more about it she grew annoyed. After that I was afraid and began to suspect she was a witch."

By drinking the life blood of numerous victims, the witch is thought to be able to prolong her own life, and it is for this reason that old people are suspected of being witches. A pregnant woman will avoid visiting an old woman during her pregnancy and the birth of a baby will be kept a secret from a suspected old woman. In some areas the death of a young person or child is considered unnatural and all such deaths are attributed to the work of witches.

In addition to old age, other factors may lead the people to regard a woman as a witch—a woman with a beard, a domineering or cantankerous woman or a woman who engages in odd behaviour. One girl told me, "An old woman in our town who used to go about collecting old broken bottles and other things and packing them in her room for no purpose was thought to be a witch, but no one said anything openly for fear of what she might do."

One of the most common deeds attributed to witches is interference with reproduction. Impotence is common among Yoruba males and it is the prevalent idea that this is the work of witches. A witch is said to be capable of taking the penis of a man and of having intercourse, using it with the man's wife or some other woman. The witch will then return the man's penis but it will be altered in some way and may not be able to function. The woman who is visited in this way may become barren. It is a not uncommon dream for a man to see someone come to him and tamper with his penis or testicles. A woman will dream of someone having intercourse with her—the visitor may be either in the form of a man or of a woman with a penis. All this is considered to be the work of witches. Witches are also thought to control the menstrual flow of women. They can make it stop or flow excessively. They may obstruct the expulsion of the child from the womb. There is some obscure fundamental relationship between witchcraft and menstrual blood. The menstruating woman and the witch both have power to render magic and the native doctor's medicines powerless. On one recent occasion in the town of A. the women of the town had risen in revolt against the payment of certain taxes which they considered to be unfair. Their power was so great that they forced the ruling chief of the town to retire to the provinces for a year. They camped in hordes in front of the chief's palace singing and causing a disturbance. When police were sent to disperse them the women brandished their menstruation cloths. This caused the police to take to their heels, for it is believed that if a man is struck by a woman's menstrual cloth he will have bad fortune for the rest of his days.

In addition to these two most emphasized propensities of the witch (i.e., to cause wasting diseases or death through sucking the blood and eating the spirit of the victim and to interfere with his sexuality), she may cause psychiatric disturbances, to be described subsequently, and all manner of other misfortunes and accidents. I will give just two further examples. A witch may cause a film

to come down over a lorry-driver's eyes so that he cannot see where he is going and will drive into the ditch (Incidentally, many lorry-drivers' cabs are so filled with charms and "medicine" hanging from the windscreen that they can scarcely see out!) I have also been told that when a witch closes her eyes she can see everywhere and can observe all that is happening. It is said of a powerful political leader, who was recently killed in a motor accident, that at one time he kept an old woman in his house who used to tell him what to do and where to go and "when the time would be safe". Later he gave up taking her advice and he was destroyed by the "medicine" of his political opponents. (The fatal accident took place near Ijebu Odi which is a town renowned for its "powerful medicines", particularly cursing, and where many of his opponents lived.)

Defences Against Witchcraft

There are three general methods by which the Yoruba may defend himself against witches: (1) with the help of native medicine usually as instructed by the native doctor, (2) through membership in certain cults, and (3) through organizing witch hunts and using trial by ordeal, though this last has been frowned upon, at least during the British regime in Nigeria. I will say a few words about each in turn.

The Yoruba native doctor sees a good deal of his work as protecting his patients from witchcraft, against malevolently-used words (i.e. curse, incantation and invocation) and against various other types of homoeopathic and contagious magics. Witchcraft is usually the territory of malignant women, while magic words and practices are the territory of the warlock. It is true that many native doctors have some conception of the physical causation of disease, e.g. that disease may come from eating incorrect foods—"cocoa doesn't grow well on all types of earth"; that "small, small bugs or worms cause tuberculous lymphadenitis"; that "epilepsy is the result of a lizard in the belly". Still the elements of witchcraft and sorcery are much emphasized. As one doctor said to me, "If you have two patients each with the same disease to the same degree and you give both the same herbs, one gets better but the other may not. This is because the witches are involved in the latter." It would appear that recently (though I have no idea when this attitude began) the relationship between the witches and the native doctors has altered. In former times, they were always at loggerheads but the native doctors' medicines were usually the more powerful and could overcome the effects of witchcraft. Now, however, the witches have become so powerful that the native doctor has joined forces with the witches and works in co-operation with them. For example, if a patient comes to the native doctor with an illness that the doctor divines or diagnoses as having an element of witchcraft in it, he will ask the patient to provide a sacrifice to the witches. After the witches are thus appeased the native doctor's medicines will be potent. I was unable to find out too much about the native doctor's dealings with the witches because of their covert nature. My visits to native doctors almost always took place amid a throng of people, my interpreter and I seated on folding wooden chairs with the doctor in a small room in his mud hut, a great press of people—men, women and children—squeezing through the narrow windows and pushing in at the door. I soon learned that under such circumstances the one subject that could not be discussed was witchcraft. I do not know whether this was because there might have been some witches in the audience who would not like their secrets revealed or whether most of the people were unaware of the co-operation between the native doctor and the witch, a

subject then that would be painful to the native doctor. At any rate it seems clear that in former days the role of the native doctor was to divine who the witch was who was causing the patient's illness, point her out and have her banished or killed. Often methods of ordeal were used to discover the witch.

I might mention some of the types of medicines used by the native doctor as defences against witchcraft. On one occasion I watched a doctor make a medicine which he said was to protect against eye diseases caused by witches. In a piece of white cloth he placed a disembowelled chicken still covered with feathers together with some other objects which looked like pieces of white soap. He bowed his head and quietly recited an incantation over the preparation. He then wrapped up these materials in the white cloth which then formed a round ball about 8 inches in diameter, and tied it around with many windings of black and white thread (the threads being placed side by side). This bundle was to be suspended from the ceiling of the patient's house. The native doctor had a similar bundle hanging from his own ceiling. The same native doctor was a "specialist" in treating mental illness* and was also using a very effective infusion of the roots of the plant *Rauwolfia vomitorum* (which contains many of the same alkaloids as *R. serpentina*, including reserpine). In addition to this tranquillizer each of his patients had every day to smear himself with black soap to protect him from the witches. Also he had growing in the middle of his compound a special tree which would not allow witch birds to perch in it. It is probable that the use of the soap and of the fowl with the feathers is related to the passage from the Ifa verses which I quoted earlier. The use of these substances prevents the witches from consuming the spirits of the patients through something akin to homoeopathic magic. The formula appears to be, "No one eats black soap or fowls with the feathers on, I have a fowl with feathers on and am covered with soap, therefore no one, not even a witch, will eat me."

To turn to the cults which may protect a man from the witches: one of the most important of these is the Gelede cult which has recently been very well described by Mr. U. Beier (1958). It is a very popular cult among the Egbado group of the Yoruba who occupy the south-western portions of Yorubaland.

The Gelede are dancers, all male except for the leader. They wear brilliantly painted wooden masks over their heads and dress up as women with large breasts and protruding buttocks. I would like to quote from Beier's article passages which describe the function of the cult and the motives for becoming a member.

> "The purpose of the Gelede dance is to 'placate the witches'. This is what every Gelede dancer says . . . The men say: Gelede is 'the secret of women'. We the men are merely their slaves. We dance to appease 'our mothers'. The witches, they say, can kill in the dark, and there is no protection from their power, 'because God has already given them permission to kill. God does not mind killing—because for every man who dies he can make a new one.'
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> "One Gelede dancer said: 'As I have already got three children, there is no reason why I should not die. Nothing prevents me from dying tomorrow. But as I am a member of the Gelede society, the witches will spare me.'
>
> "Another dancer expressed it as follows: 'God gave the world to the witches. They have permission to kill. In the olden days they did a great deal of harm to our fathers. But our fathers thought for a long time until they found a way to placate them and win their favour, thus the Gelede society was started. Fear of death made us join this society. Because the witches cannot harm anyone inside the society'."

The dance may occur once a year or perhaps oftener depending upon the leader. The main portion of the dance takes place at night though some of the masqueraders may dance the next day for general amusement. The dance is

* See also Prince (1960 c.).

highly organized with different members of the cult appearing in special order and singers who accompany the drumming with songs sacred to the society. Part of one of the songs addressed to the "great mothers" is of considerable interest and is as follows:

> "All-powerful mother, mother of the nightbird
> Mother who kills animals without striking
> .....
> My mother kills quickly without a cry
> To prick our memory suddenly
> Quickly as the woodpecker picks the tree on the farm
> The woodpecker who hammers the tree while words rush forth from his mouth,
> Great mother with whom we dare not cohabit
> Great mother whose body we dare not see
> Mother of secret beauties
> Mother who empties the cup
> Who speaks out with the voice of a man,
> Large, very large mother on the top of the Iroko tree,
> Mother who climbs high and looks down on the earth
> Mother who kills her husband yet pities him."

The masks used in the dance are ingeniously carved and have a great variety of subjects. Above the carved heads are serpents, women in exhibitionistic poses, mothers and children, or witch birds pecking into the head. (I have also seen one of a woman sitting at a sewing machine and another of an aeroplane with propellers at both ends!)

It seems clear, that the feminine costume represents incorporation of and identification with the threatening mothers—a kind of ritualized transvestitism as a defence against the devouring and castrating mother.

The witch hunt is another method of defence against witches. As I have said, at the present time the witches are too powerful in Yorubaland to be openly opposed by the native doctors (some of whom actually dance under the Gelede masks). Occasionally, however, a group of diviners and ordeal men may band together and go from village to village to search out the witches. Such a band was the Atinga, a group which began its activities in the northern Gold Coast, spread down to the coastal areas of the Gold Coast and through Togoland and Dahomey to southern Nigeria. The Atinga sought the assistance of the heads of the villages who called their people together. The Atinga leaders began to beat the drums and dance in the circle of collected villagers. During the dance one of the Atinga became possessed, claimed to receive the ability to prophesy and pick out witches. The accused women were forced to bring out their witching apparatus—calabashes, familiars, red feathers, etc.—and confess their evil deeds. If a woman refused to confess she had to undergo an ordeal. She had to bring a fowl, some gin and some money. The gin was poured out as a libation, and the fowl had its throat half cut so that it would run about for a while, then collapse. If the chicken collapsed with its breast upright, the woman was acquitted. If the ordeal was unfavourable the woman could try a second time providing she paid more money. Most women confessed, but a few were beaten to death. The movement was quashed by the British Government in 1951.

Many Yoruba recall vividly the Atinga hunts. According to one informant, the king of the town of A. did not invite the Atinga to practise their arts in his town because he said that many of the pillars of the community were witches. Another Yoruba, a schizophrenic patient, said that his brother, who was a policeman, had been instrumental in bringing the Atinga into his home town.

He said that shortly afterwards his brother was killed under unusual circumstances and he himself "ran mad". He attributed both of these misfortunes to his brother's meddling in the affairs of the town witches.

The Witch and Psychiatric Disturbance

Patients suffering psychiatric disturbances frequently consider their symptoms to be the result of witchcraft. Many schizophrenic patients, for example, accuse their mothers of being witches. Indeed the sight of the psychotic son, apathetic and with downcast eyes, walking down the road behind his mother renders the fantasy of the consumption of the son's spirit by the mother not too unrealistic.

The patient may implicate the witches in his illness for a number of reasons. Perhaps the commonest indications are to be found in dreams—dreams of drowning are almost always interpreted in this way; dreams of intercourse with unknown persons or of having ones genitals tampered with or the classical "nightmare" dream experience (feeling of pressure on the chest, terror and suffocation) are other examples. Secondly, the native doctor, as a result of his divination, may inform the patient that he is being troubled by a witch. It may also happen that the patient develops symptoms during the time the patient is having some difficulties with a woman. He may then of course attribute these symptoms to the witchcraft of his female opponent.

An illustrative example might be helpful here. P.F. was a 17-year-old Yoruba male admitted to Aro Hospital, Abeokuta, in March, 1959, with the complaints that he had been behaving irrationally (fighting with other students in his school for no reason and running away from school), he was rambling and abstract in his conversation and unable to do his school work. The patient's father, an executive in a Government Department, had two wives, the patient being the only child of the senior wife. The junior wife had two children. All the children were attending the same school and whereas the patient was a good student, the son of the junior wife was a poor student and the father proposed to take the poor student out of school but send the patient on into higher education. This was a source of intense annoyance to the junior wife. The patient describes the onset and course of his illness as follows:

"At the end of 1957, I finished school and went to Lagos to spend the holiday with my father. On reaching Lagos I met my brother O., who failed the examination, and my sister and we were very loving to ourselves. Seeing how co-operative we three were, their mother would always call them and advise them to sever their connection from me. I had one bed with O. where we both slept and studied. I woke up one night about 1 a.m. and found O. gone. I intended to put my pen under the pillow where I met a butchered red-headed lizard. The intestines were removed and inside the stomach were seven needles and some ashes. Since that time I haven't been able to study any book or even stay in the school hostel—there are certain commanding instincts in me that push me to do certain things that I know to be very bad. I also have nightmares all the time that my father's second wife is beating me."

Because of these symptoms he was expelled from school and taken to several native doctors, but to no avail. The native doctors and the patient attributed his illness to the witchcraft of the second wife. In this instance certain medicine (i.e. the lizard and needles) was used but this is the exception rather than the rule with witches.

With the psychotic patient, the content of his hallucinatory experience may convince him that witches are attacking him. For example a 20-year-old Yoruba student described the onset of his psychosis as follows:

"I was sitting at my table in my room late at night . . . I had a strange feeling and looked up and saw a woman standing looking in at my window. Then a white bird flew from the woman into my mouth and lodged in my throat so that I couldn't speak and felt choked."

This student was subsequently admitted to hospital in a disturbed state; he heard the voice of the holy spirit and expressed the idea that a witch and the holy spirit were fighting inside of him.

A third example is that of M.N., a 35-year-old single Yoruba cocoa farmer convicted of decapitating a woman with a matchet. He said that his trouble had started in 1956 and that he was being troubled by witchcraft day and night. The witches were talking to him continually saying such things as "It's done, he's killed: we have killed him now, now we will kill his brother", etc. The witches had started to trouble him after he had refused to attend the Cherubim and Seraphim church. "After that I would hear bats' voices in my ears and I would be confused. They troubled me at night in dream, they would come both man and woman and pull at my testicles and penis. One night they cut my penis right off but I prayed and it was restored . . . in the morning I could see all the veins were coming out and it was not normal." It was clear that this patient had the idea that the woman he killed was the witch that was tormenting him.

The delusion of being a witch also occurs; however, the woman who makes such a confession is generally not regarded as being delusional or psychotic, the idea being, as it were, culturally syntonic. There is the belief in some parts of Yorubaland that a witch cannot die until she has confessed her evil deeds, and in conformity with this idea certain old women (probably suffering senile psychoses) may be seen wandering around the streets telling of the people they have killed and the children they have eaten. Such old women are generally driven from their homes and may be stoned in the streets. None of these patients were brought to the psychiatric clinic. On one occasion, however, a psychotic woman who had believed she was a witch and had killed her young daughter was referred from the court. Her confession written a few hours after the killing read as follows:

". . . between the night of Tuesday and Wednesday the 20th and 21st of August, my mates in witchcrafts came to my house and instructed me to kill my daughter O. and I killed her that very night with a stick which is still in my room, and before this done I held her two legs swinged her around my head and knocked her on the floor three times. All these being done in the night. After the death I used matchet to cut her two legs and I threw the matchet in a brook. I also killed a cat and packed both the cat and my daughter in a basket."

Discussion

The idea associated with the name of Melanie Klein (1935, 1940) that the infant passes through a stage in which he divides his mother into two entities, one good and the other bad, has merited considerable contemporary interest. Under normal circumstances this propensity seems to occur between the ages of three months and one year and resolves itself in the so-called "depressive position" when the child is capable of grasping that the good mother and the bad mother are in reality one. This splitting of an object into good and bad entities may also be observed in adult psychotics. For example a housewife suffering from paranoid schizophrenia was transferred to me from a rather aggressive female psychiatrist. The patient expressed the idea that there were really two of her former psychiatrists, one who was tender and friendly, the other who was brusque and short-tempered. She said they both looked the same but that she felt that one was real while the other was an impostor. It would seem that by the adult, a person is recognized to be an entity largely on the basis of external and objective cues, e.g. on the basis of external appearance, gestures, voice, etc., whereas by the infant (and the schizophrenic noted above) the test of

identity is "similarity of feeling toward" so that a person that aroused fear or hostility had to be a different entity from the one that aroused pleasure.

To return to the idea of the witch, it is an attractive hypothesis that the Yoruba witch represents the collective image of the bad mother in a people who have not yet attained the depressive position in their emotional development. I do not think we would be distorting the Yoruba concept too much to think of witchcraft as representing all the bad aspects of the mother or the female. It is true that not all women are thought to be witches, but all women are *potentially* witches and they are linked to witchcraft in some way through the common bond of menstruation. The fact that the witches are called "our mothers" and the fact that many schizophrenics say their mothers are witches seems to lend support to the idea.

It may also be noted that depressions are rare among the Yoruba. Paranoid thinking is common but the profound self-castigating melancholia so commonly seen in the contemporary Western man is very uncommon. I can remember only one case of this type and the patient was highly Westernized—reared in a literate Christian home, well educated herself, and who had lived in England for several years. Could this mean that the Yoruba as a culture has not reached the "depressive position"?

It is also of interest that the Yoruba mother tends to be idealized to a considerable extent and the relationship between mother and son is much more significant than between husband and wife. The latter relationship is almost distant—there seems to be no romantic element, wives being of value as status symbols and as bearers of children rather than for warmth of relationship. There seems to be some evidence then that with the Yoruba, their emotional development is arrested to the extent that intense relationships exist primarily between mother and child and that even in this relationship the mother tends to be on the one hand revered unrealistically and over-valued and on the other hand feared as a destructive entity in the background with all her witchly attributes. The fusion of these two images has not yet occurred, the depressive position not yet reached, the Yoruba has not yet been able to release himself from his mother so that little progress has been made towards relationship between husband and wife.

To turn for a moment to the interesting question—what changes have occurred in Western culture that have allowed the witch fantasy to lose its erstwhile potency? I would like to draw attention to three books published in a cluster about the beginning of the 17th century: Reginald Scot's *Discoverie of Witchcraft* (1584), Cervantes' *Don Quixote* (1605) and Burton's *Anatomy of Melancholy* (1621). The first two of these books mark the beginning of the end of two rather extraordinary attitudes towards the female sex in Europe.* Scot was one of the first to ridicule the idea of the witch and question the reality of her abilities to fly, transform herself into animals, etc. Cervantes' book was a satire on the knight and his ideal lady and marked the beginning of the fading of that complementary medieval female image—the knight's lady—which had existed for some 300 years alongside the image of the witch. The third of these books marks the high point as it were in the Renaissance pre-occupation with the problems of melancholia, depression and death. These problems were of great interest to Elizabethan dramatists and poets and there are numerous representations and paintings of the Danse Macabre and the Dance of Death. Can we take this interest in melancholia as an indication that there was in fact

* For interesting descriptions of the evolution of relationships in Europe see De Rougement (1940) and Lucka (1922).

a wave of depression spreading over Europe between the 14th and 17th centuries? The literary and artistic interest in depression and death is generally attributed to the plague and poverty produced by the Hundred Years War. Is it possible that the depression resulting from the attainment of the cultural "depressive position" was the primary event and that the Black Death was in part a symptom of this wave of depression? We could look upon the Renaissance then as a leap forward in reality testing with a concomitant release of human vitality accompanying the European "working through" of its depressive position.

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Reviews

The Psychology of Crime. By DAVID ABRAHAMSEN, M.D. Columbia University Press, 1961.

In this last chapter the author states, "Volumes have been written about the prevention of crime . . . " and in fact volumes have also been written about the psychology of crime. Most of them have failed to stress the overwhelming part the mind plays in the commission of a crime and the variations between human beings. Dr. Abrahamsen does not repeat this mistake and throughout his book he quotes examples where a careful study of the nature of the crime and the criminals concerned have led to the revelation of deep psychiatric disturbance. The book is very simply written, often going into elementary explanations of psychopathology which may make many professional men discard it. In addition, little new is brought out as to the psychological processes at work in the criminal. But the work is comprehensive and collates present knowledge extremely well. For the beginner it is excellent and should be read by all concerned with crime; nor should it be avoided by the general public. It has the drawback for British readers of being based on American cases and American law, but this is a small disadvantage compared with other features of the book. In his early chapters the author is pedantic and tries to cram too much history into too small a space and to reduce criminal behaviour to a mathematical formula. He writes well, however, on the effects of personality, family tension and psychosomatic disorders in the aetiology of crime. The chapters on the sex offender and the murdered are particularly good. Dr. Abrahamsen's psychopathological approach is Freudian, and while he outlines the shortcomings of psychoanalysis with certain types of criminals and in certain environments he recommends this form of treatment to such an extent as to be impracticable both as to time and expense and availability of trained analysts. The suggestion that it would be of great advantage if all probation officers had been analysed is an example of the author's idealism. An attempt is made to study possible ways of preventing crime and to deplore the slow progress made in the fields of rehabilitation and correction. He states "it is regrettable that the great strides we have made in psychoanalysis, psychiatry, sociology, anthropology, education and social work have been applied in such small measure to the actual treatment practices in the field of juvenile delinquency and crime, particularly with regard to correction". This applies to this country as much as to the United States. Perhaps if some of Dr. Abrahamsen's suggestions were implemented progress would be more rapid. This book should therefore be read by all who would like to assist in such progress.

The Sturge-Weber Syndrome. By G. L. ALEXANDER and R. M. NORMAN. John Wright & Sons, Ltd., Bristol, 1960. Pp. 104. Price 32*s.* 6*d.*

This monograph is largely based on seven cases examined and investigated in detail by the authors, on five of which lobectomy of the affected brain areas was carried out. Case histories and clinical descriptions are provided, together with radiographic, electro-encephalographic, neuropathological and psychometric studies. The authors open with a brief but lucid history of the medical conception of the disease and its relationship to some other syndromes with which comparison has often been made. The literature has been thoroughly examined and nearly 500 references supplied.

Although little that is new or disputed appears here, there is a wealth of detailed and accurate information, and a few interesting points are made that are new or little known. For instance, out of 257 reported cases that satisfy the authors' diagnostic criteria, the facial naevus involved the forehead and upper eyelid in every instance whereas, when the naevus lay entirely below the level of the palpebral fissure, no proof of the presence of cerebral angiomatosis has ever been found. The authors quote this

observation in discussing their hypothesis of the embryological place and time of origin of the lesion. In relation to aetiology, it is noteworthy that two of the authors' seven cases showed heterochromia iridis and a few examples of this have been mentioned in the literature. This is interesting because it can arise from somatic mutation, which has also been postulated as a cause of Sturge-Weber Syndrome.

Almost any information a reader is likely to require about the Sturge-Weber Syndrome is to be found here. The book is well produced on good quality paper and the photographic reproductions are of high standard.

WILLIAM McCARTAN
President 1961-62